

04-08-02

Re: Litigation Search U.S. Patent 5,637,913

Examiner Glick,

Attached are search results from our litigation search on U. S. patent 5,637,913. I also searched on family member 5,378,656. I found no litigation in searches of the Lexis-Nexis and Questel-Orbit databases. Please let me know if you have any questions or need further searching.

Thanks,

Anne Hendrickson
308-6559
CP4-9C18

4/8/02

L1 ANSWER 1 OF 2 INPADOC COPYRIGHT 2002 EPO

PATENT FAMILY INFORMATION
AN 36672007 INPADOC

PRIORITY (1): JP 1992-71116

A 19920327

+-----AI-----+
JP 1993-65784 A 19930325

JP 1998-185261 A 19980630
JP 1998-333269 A 19980101
JP 1998-333270 A 19980101
JP 1998-333271 A 19980101
JP 2000-73486 A 20000101
US 1993-38684 A 19930329
US 1994-311021 A 19940922

+-----PI-----+
JP 06216303 A2 19940805
JP 2891607B B2 19990517
JP 10326859 A2 19981208
JP 11224928 A2 19990817
JP 11224929 A2 19990817
JP 11224930 A2 19990817
JP 2000286374 A2 20001013
US 5378656 A 19950103
US 5637913 A 19970610

PRIORITY (2): JP 1992-320098

A 19921130

+-----AI-----+
JP 1993-65784 A 19930325

JP 1998-185261 A 19980630
JP 1998-333269 A 19980101
JP 1998-333270 A 19980101
JP 1998-333271 A 19980101
JP 2000-73486 A 20000101
US 1993-38684 A 19930329
US 1994-311021 A 19940922

+-----PI-----+
JP 06216303 A2 19940805
JP 2891607B B2 19990517
JP 10326859 A2 19981208
JP 11224928 A2 19990817
JP 11224929 A2 19990817
JP 11224930 A2 19990817
JP 2000286374 A2 20001013
US 5378656 A 19950103
US 5637913 A 19970610

PRIORITY (3): JP 1993-65784

A 19930325

+-----AI-----+
JP 1993-65784 A 19930325

+-----PI-----+
JP 06216303 A2 19940805
JP 2891607B B2 19990517

PRIORITY (4): US 1993-38684

A3 19930329

+-----AI-----+
US 1994-311021 A 19940922

+-----PI-----+
US 5637913 A 19970610

PRIORITY (5): US 1994-311021

A 19940922

+-----AI-----+
US 1994-311021 A 19940922

+-----PI-----+
US 5637913 A 19970610

PRIORITY (6): JP 1998-185261

A 19980630

+-----AI-----+
JP 1998-185261 A 19980630

+-----PI-----+
JP 10326859 A2 19981208

1 of 1 DOCUMENT

5,378,656.

GET 1st DRAWING SHEET OF 21

Jan. 3, 1995

Leadframe, semiconductor integrated circuit device using
the same, and method of and process for fabricating the same

INVENTOR: Kajihara, Yujiro, Tachikawa, Japan

Suzuki, Kazunari, Tokyo, Japan

Tsubosaki, Kunihiro, Hino, Japan

Suzuki, Hiromichi, Machida, Japan

Miyaki, Yoshinori, Kokubunji, Japan

Naito, Takahiro, Koganei, Japan

Kawai, Sueo, Iwama, Japan

ASSIGNEE-AT-ISSUE: Hitachi, Ltd., Tokyo, Japan (03) , Hitachi Microcomputer
System Ltd., Ibaraki, Japan (03)

ASSIGNEE-AFTER-ISSUE: Date Transaction Recorded: May 26, 2000

CHANGE OF NAME (SEE DOCUMENT FOR DETAILS).

HITACHI ULSI SYSTEMS CO., LTD. 22-1, JOSUIHONCHO, 5-CHOME, KODAIRA-SHI TOKYO,
JAPAN

Reel & Frame Number: 010804/0789

APPL-NO: 38,684

FILED: Mar. 29, 1993

FOR-PRIOR:

Mar. 27, 1992 Japan 4-071116

Nov. 30, 1992 Japan 4-320098

INT-CL: [6] H01L 21#60

US-CL: 29#827; 438#118; 438#123;

CL: 29;438;

SEARCH-FLD: 437#209, 211, 214, 217, 220

REF-CITED:

U.S. PATENT DOCUMENTS

4,534,105	8/1985	* Reusch	357#70
4,829,362	5/1989	* Tran et al.	437#217
4,835,120	5/1989	* Mallik et al.	437#209
4,868,635	9/1989	* Frechette et al.	357#70
5,083,186	1/1992	* Okada et al.	437#220
5,177,032	1/1993	* Fogal et al.	437#220

5,256,598 10/1993 * Farnworth et al.

437#217

FOREIGN PATENT DOCUMENTS

92535	5/1984	* Japan
204753	8/1988	* Japan
74065	3/1990	* Japan
83961	3/1990	* Japan

OTHER PUBLICATIONS

"Nikkei Microdevices, December, 1987", pp. 76-78 (with English language translation).

PRIM-EXMR: Thomas, Tom

ASST-EXMR: Picardat, Kevin M.

LEGAL-REP: antonelli, Terry, Stout & Kraus

ABST:

In order to improve the package body cracking resistance of an LSI package at the reflow soldering and to provide both a leadframe suitable for fabricating the LSI package according to the flexible manufacturing system and an LSI using the leadframe, the adhered area between a semiconductor chip 2 and a resin is enlarged by making the external size of a die pad 3 smaller than that of the semiconductor chip to be mounted thereon. Moreover, a variety of semiconductor chips 2 having different external sizes can be mounted on the die pad 3 by cutting the leading ends of leads 5 to a suitable length in accordance with the external sizes of the semiconductor chips 2.

NO-OF-CLAIMS: 23

EXMPL-CLAIM: 1

NO-OF-FIGURES: 36

NO-DRWNG-PP: 21

SUM:

BACKGROUND OF THE INVENTION

The present invention relates to a leadframe for mounting a semiconductor chip, a semiconductor integrated circuit device using the same, and a method of and process for fabricating the same. More particularly, the present invention relates to a technology which is effective when applied for standardizing the leadframe and for improving the reflow cracking resistance of an LSI package.

The resin body, i.e., LSI package of a surface mounting type resin molded device (or surface mount device) such as a QFP (i.e., quad Flat Package) has an important target of suppressing the package cracking (i.e., resin body cracking) in a reflow soldering step.

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1/1 INPADOC - (C) INPADOC

PN - US 5378656 A 19950103 [US5378656]
TI - LEADFRAME, SEMICONDUCTOR INTEGRATED CIRCUIT DEVICE USING THE SAME, AND
METHOD OF AND PROCESS FOR FABRICATING THE SAME
IN - KAJIHARA YUJIRO [JP]; SUZUKI KAZUNARI [JP]; TSUBOSAKI KUNIHIRO [JP];
SUZUKI HIROMICHI [JP]; MIYAKI YOSHINORI [JP]; NAITO TAKAHIRO [JP];
KAWAI SUEO [JP]
PA - HITACHI LTD [JP]; HITACHI MICROCOMPUTER SYST [JP]
AP - US 38684/93-A 19930329 [1993US-0038684]
PR - JP 71116/92-A 19920327 [1992JP-0071116]
- JP 320098/92-A 19921130 [1992JP-0320098]
IC - H01L-021/60

1/1 LGST - (C) LEGSTAT

PN - US 5378656 [US5378656]
AP - US 38684/93 19930329 [1993US-0038684]
DT - US-P
ACT - 19930329 US/AE-A
APPLICATION DATA (PATENT)
{US 38684/93 19930329 [1993US-0038684]}
- 19940721 US/AS02
ASSIGNMENT OF ASSIGNOR'S INTEREST
HITACHI, LTD. CHIYODA-KU, TOKYO, JAPAN; HITACHI MICROCOMPUTER SYSTEM
LTD. KODAIR * KAJIHARA, YUJIRO : 19930304; SUZUKI, KAZUNARI :
19930304; TSUBOSAKI, KUNIHIRO : 19930304; SUZUKI, HIROMICHI : 19930304;
- 19950103 US/A
PATENT
UP - 1999-18

1/1 CRXX - (C) CLAIMS/RRX

PN - 5,378,656 A 19950103 [US5378656]
PA - Hitachi Ltd JP; Hitachi Microcomputer System Ltd JP
ACT - 20000526 REASSIGNED
CHANGE OF NAME

Assignor: HITACHI MICROCOMPUTER SYSTEM, LTD. DATE SIGNED: 04/01/1998

Assignee: HITACHI ULSI SYSTEMS CO., LTD. 22-1, JOSUIHONCHO, 5-CHOME,
KODAIRA-SHI TOKYO, JAPAN

Reel 010804/Frame 0789

Contact: ANTONELLI, TERRY, STOUT & KRAUS, LLP PAUL J. SKWIERAWSKI 1300
NORTH SEVENTEENTH STREET SUITE 1800 ARLINGTON, VIRGINIA 22209

Search statement 3

?

1 of 1 DOCUMENT

5,637,913

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Jun. 10, 1997

Leadframe semiconductor integrated circuit device using
the same and method of and process for fabricating the two

REISSUE: Reissue Application filed Nov. 16, 2001 (O.G. Jan. 15, 2002) Ex. Gp.:
1731; Re. S.N. 09/987,978

Reissue Application filed Jun. 9, 1999 (O.G. Aug. 3, 1999) Ex. Gp.: 2811; Re.
S.N. 09/328,910

INVENTOR: Kajihara, Yujiro, Tachikawa, Japan
Suzuki, Kazunari, Tokyo, Japan
Tsubosaki, Kunihiro, Hino, Japan
Suzuki, Hiromichi, Machida, Japan
Miyaki, Yoshinori, Kokyubunji, Japan
Naito, Takahiro, Koganei, Japan
Kawai, Sueo, Iwama-machi, Japan

ASSIGNEE-AT-ISSUE: Hitachi, Ltd., Tokyo, Japan (03) , Hitachi Microcomputer
System, Ltd., Tokyo, Japan (03)

ASSIGNEE-AFTER-ISSUE: Date Transaction Recorded: May 18, 2000

CHANGE OF NAME (SEE DOCUMENT FOR DETAILS).

HITACHI ULSI SYSTEMS CO., LTD. 22-1, JOSUIHONCHO, 5-CHOME, KODAIRA-SHI TOKYO,
JAPAN

Reel & Frame Number: 010828/0905

APPL-NO: 311,021

FILED: Sep. 22, 1994

FOR-PRIOR:

Mar. 27, 1992 Japan 4-071116
Nov. 30, 1992 Japan 4-320098

REL-US-DATA:

Division of Ser. No. 38,684, Mar. 29, 1993

INT-CL: [6] H01L 23#495; H01L 23#48

US-CL: 257#666; 257#672; 257#674; 257#676; 257#783;

CL: 257;

SEARCH-FLD: 257#676, 666, 672, 677, 670, 674, 675, 669, 783, 784, 785, 782

REF-CITED:

U.S. PATENT DOCUMENTS

4,534,105	8/1985	* Reusch	29#589
4,663,650	5/1987	* Gilder, Jr. et al.	257#676
4,829,362	5/1989	* Tran et al.	437#217
4,835,120	5/1989	* Mallik et al.	437#207
4,868,635	9/1989	* Frechette et al.	257#670
4,989,068	1/1991	* Yasuhara et al.	257#677
5,083,186	1/1992	* Okada et al.	437#220
5,150,193	9/1992	* Yasuhara et al.	257#676
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5,223,740	6/1993	* Ishikawa et al.	257#676
5,256,598	10/1993	* Farnworth et al.	437#220
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5,334,803	8/1994	* Yamamura et al.	257#692

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59-92535	5/1984	* Japan	
204753	8/1988	* Japan	
83961	1990	* Japan	
2-74065	3/1990	* Japan	
3-068164	3/1991	* Japan	257#666

OTHER PUBLICATIONS

"Electronic Packaging and Interconnection Handbook", pp. 7.25-7.27 (7.7.2.), C. Harper.

"Webster's II New Riverside University Dictionary", pp. 772-773.

PRIM-EXMR: Saadat, Mahshid D.

ASST-EXMR: Clark, Jhihan B.

LEGAL-REP: Antonelli, Terry, Stout & Kraus, LLP

ABST:

In order to improve the package body cracking resistance of an LSI package at the reflow soldering and to provide both a leadframe suitable for fabricating the LSI package according to the flexible manufacturing system and an LSI using the leadframe, the adhered area between a semiconductor chip 2 and a resin is enlarged by making the external size of a die pad 3 smaller than that of the semiconductor chip to be mounted thereon. Moreover, a variety of semiconductor chips 2 having different external sizes can be mounted on the die pad 3 by cutting the leading ends of leads 5 to a suitable length in accordance with the external sizes of the semiconductor chips 2.

NO-OF-CLAIMS: 14

EXMPL-CLAIM: 1

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1/1 PLUSPAT - (C) QUESTEL-ORBIT- image

CPIM (C) Questel-Orbit

PN - US5637913 A 19970610 [US5637913]

TI - (A) Leadframe semiconductor integrated circuit device using the same and method of and process for fabricating the two

PA - (A) HITACHI LTD (JP); HITACHI MICROCOMPUTER SYST (JP)

IN - (A) KAJIHARA YUJIRO (JP); SUZUKI KAZUNARI (JP); TSUBOSAKI KUNIHIRO (JP); SUZUKI HIROMICHI (JP); MIYAKI YOSHINORI (JP); NAITO TAKAHIRO (JP); KAWAI SUEO (JP)

AP - US31102194 19940922 [1994US-0311021]

PR - JP7111692 19920327 [1992JP-0071116]

- JP32009892 19921130 [1992JP-0320098]

- US3868493 19930329 [1993US-0038684]

- US31102194 19940922 [1994US-0311021]

IC - (A) H01L-023/48 H01L-023/495

EC - H01L-021/48C3M

- H01L-023/495A

- H01L-023/495A6

- H01L-023/495G

PCL - ORIGINAL (O) : 257666000; CROSS-REFERENCE (X) : 257672000 257674000
257676000 257783000

DT - Basic

CT - US4534105; US4663650; US4829362; US4835120; US4868635; US4989068;
US5083186; US5150193; US5177032; US5182630; US5223740; US5256598;
US5327008; US5334803; JP59-92535; JP204753; JP83961; JP2-74065;
JP3-068164

- "Electronic Packaging and Interconnection Handbook", pp. 7.25-7.27
(7.7.2.), C. Harper.

"Webster's II New Riverside University Dictionary", pp. 772-773.

STG - (A) United States patent

AB - In order to improve the package body cracking resistance of an LSI package at the reflow soldering and to provide both a leadframe suitable for fabricating the LSI package according to the flexible manufacturing system and an LSI using the leadframe, the adhered area between a semiconductor chip 2 and a resin is enlarged by making the external size of a die pad 3 smaller than that of the semiconductor chip to be mounted thereon. Moreover, a variety of semiconductor chips 2 having different external sizes can be mounted on the die pad 3 by cutting the leading ends of leads 5 to a suitable length in accordance with the external sizes of the semiconductor chips 2.

1/1 LGST - (C) LEGSTAT

PN - US 5637913 [US5637913]

AP - US 311021/94 19940922 [1994US-0311021]

DT - US-P

ACT - 19940922 US/AE-A

APPLICATION DATA (PATENT)

{US 311021/94 19940922 [1994US-0311021]}

- 19970610 US/A

PATENT

- 19990803 US/RF

REISSUE APPLICATION FILED

19990609

- 20020115 US/RF

REISSUE APPLICATION FILED
20011116
UP - 2002-05

1/1 CRXX - (C) CLAIMS/RRX
PN - 5,637,913 A 19970610 [US5637913]
PA - Hitachi Ltd JP; Hitachi Microcomputer System Ltd JP
ACT - 19990609 REISSUE REQUESTED
ISSUE DATE OF O.G.: 19990803
REISSUE REQUEST NUMBER: 09/328910
EXAMINATION GROUP RESPONSIBLE FOR REISSUEPROCESS: 2811

Reissue Patent Number:

- 20000518 REASSIGNED
CHANGE OF NAME

Assignor: HITACHI MICROCOMPUTER SYSTEM, LTD. DATE SIGNED: 04/01/1998

Assignee: HITACHI ULSI SYSTEMS CO., LTD. 22-1, JOSUIHONCHO, 5-CHOME,
KODAIRA-SHI TOKYO, JAPAN

Reel 010828/Frame 0905

Contact: ANTONELLI, TERRY, STOUT & KRAUS, LLP PAUL J. SKWIERAWSKI 1300
N. SEVENTEENTH STREET, SUITE 1800 ARLINGTON, VA 22209

- 20011116 REISSUE REQUESTED
ISSUE DATE OF O.G.: 20020115
REISSUE REQUEST NUMBER: 09/987978
EXAMINATION GROUP RESPONSIBLE FOR REISSUEPROCESS: 1731

Reissue Patent Number:

1/2 PAST - (C) PAST
AN - 200203-001687
PN - 5637913 A [US5637913]
OG - 2002-01-15
ACT - REISSUE APPLICATION FILED

2/2 PAST - (C) PAST
AN - 199931-000575
PN - 5637913 A [US5637913]
OG - 1999-08-03
ACT - REISSUE APPLICATION FILED

Search statement 4

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1/37 INPADOC - (C) INPADOC

PN - DE 4404637 A1 19940818 [DE4404637]
TI - AXIALLAGERAUFBAU EINES TAUMELSCHEIBEN-KOMPRESSORS
IN - IKEDA HAYATO [JP]; MORI HIDEO [JP]; NAKAJIMA TOSHIYUKI [JP]; TAKEMOTO
SHOJI [JP]
PA - TOYODA AUTOMATIC LOOM WORKS [JP]
AP - DE 4404637/94-A 19940214 [1994DE-4404637]
PR - JP 25710/93-A 19930215 [1993JP-0025710]
IC - F04B-039/00; F16C-033/58

1/1 LEGALI - (C) LEGSTAT

PN - DE 4404637 [DE4404637]
AP - DE 4404637/94 19940214 [1994DE-4404637]
DT - DE-P
ACTE- 19940214 DE/AE-A
DOMESTIC APPLICATION (PATENT APPLICATION)
{DE 4404637/94 19940214 [1994DE-4404637]}
- 19940818 DE/A1 [+]
LAYING OPEN FOR PUBLIC INSPECTION
- 19940818 DE/OP8 [+]
REQUEST FOR EXAMINATION AS TO PARAGRAPH 44 PATENT LAW
- 19970710 DE/D2 [+]
GRANT AFTER EXAMINATION
- 19980115 DE/8364 [+]
NO OPPOSITION DURING TERM OF OPPOSITION
UP - 1998-10

2/37 INPADOC - (C) INPADOC

PN - DE 69400347 C0 19960905 [DE69400347]
TI - SCHIEBSCHIEBENVERDICHTER MIT SCHMIERVORRICHTUNG FUER GLEITSCHUH UND
SCHIEBSCHIEBE
IN - OGURA TOSHIYUKI [JP]; SHIMIZU SHIGEMI [JP]; SAITO KENJI [JP]; SAKAKI
MASAKATSU [JP]
PA - SANDEN CORP [JP]
AP - DE 69400347/94-A 19940310 [1994DE-6000347]
PR - JP 10140/93-U 19930310 [1993JP-U010140]
- JP 10753/93-U 19930312 [1993JP-U010753]
- JP 12092/93-U 19930318 [1993JP-U012092]
- JP 25710/93-U 19930518 [1993JP-U025710]
- JP 65784/93-U 19931209 [1993JP-U065784]
IC - F04B-027/08

1/2 LEGALI - (C) LEGSTAT

PN - DE 69400347 [DE69400347]
DT - DE-P
ACTE- 19960905 DE/REF-P
CORRESPONDS TO
(EP 623745 19960905 [EP-623745])
- 19970116 DE/8373
TRANSLATION OF PATENT DOCUMENT OF EUROPEAN PATENT WAS RECEIVED AND HAS
BEEN PUBLISHED
- 19970828 DE/8364 [+]
NO OPPOSITION DURING TERM OF OPPOSITION

UP - 1997-35

2/2 LEGALI - (C) LEGSTAT

PN - EP 623745 [EP-623745]

AP - EP 94301704/94 19940310 [1994EP-0301704]

DT - EP-P

ACTE- 19940310 EP/AE-A

EP-APPLICATION

{EP 94301704/94 19940310 [1994EP-0301704]}

- 19941109 EP/AK-A2 [+]

DESIGNATED CONTRACTING STATES IN AN APPLICATION WITHOUT SEARCH REPORT:

DE FR GB IT SE

- 19941109 EP/A2 [+]

PUBLICATION OF APPLICATION WITHOUT SEARCH REPORT

- 19950118 EP/AK-A3 [+]

DESIGNATED CONTRACTING STATES IN A SEARCH REPORT:

DE FR GB IT SE

- 19950118 EP/A3 [+]

SEPARATE PUBLICATION OF THE SEARCH REPORT (ART. 93)

- 19950628 EP/17P [+]

REQUEST FOR EXAMINATION FILED

950426

- 19950712 EP/17Q [+]

FIRST EXAMINATION REPORT

950530

- 19951227 EP/AH-P

DIVISIONAL APPLICATION (ART. 76) IN:

(EP 688953 19951227 [EP-688953])

- 19960724 EP/RPR1

PRIORITY (CORRECTION)

JP 930310 10140/93 U * JP 930312 10753/93 U * JP 930318 12092/93

U * JP 930518 25710/93 U * JP 931209 65784/93 U

- 19960724 EP/XX

MISCELLANEOUS:

- 19960731 EP/AK-B1 [+]

DESIGNATED CONTRACTING STATES MENTIONED IN A PATENT SPECIFICATION:

DE FR GB IT SE

- 19960731 EP/B1 [+]

PATENT SPECIFICATION

- 19960905 EP/REF-P

CORRESPONDS TO:

(DE 69400347 19960905 [DE69400347])

- 19960906 EP/ET [+]

FR: TRANSLATION FILED

- 19961001 EP/ITF [+]

IT: TRANSLATION FOR A EP PATENT FILED

JACOBACCI & PERANI S.P.A.

- 19970723 EP/26N [+]

NO OPPOSITION FILED

- 19981118 EP/AH-P

DIVISIONAL APPLICATION (ART. 76) IN:

(EP 688953 19981118 [EP-688953])

- 19991101 EP/EUG [-]

SE: EUROPEAN PATENT HAS LAPSED

94301704.6

- 19991206 EP/EUG [-]

SE: EUROPEAN PATENT HAS LAPSED

94301704.6

UP - 1999-49

3/37 INPADOC - (C) INPADOC

PN - DE 69400347 T2 19970116 [DE69400347]
TI - SCHIEBSCHIEBENVERDICHTER MIT SCHMIERVORRICHTUNG FUER GLEITSCHUH UND
SCHIEBSCHIEBE
IN - OGURA TOSHIYUKI [JP]; SHIMIZU SHIGEMI [JP]; SAITO KENJI [JP]; SAKAKI
MASAKATSU [JP]
PA - SANDEN CORP [JP]
AP - DE 69400347/94-A 19940310 [1994DE-6000347]
PR - JP 10140/93-U 19930310 [1993JP-U010140]
- JP 10753/93-U 19930312 [1993JP-U010753]
- JP 12092/93-U 19930318 [1993JP-U012092]
- JP 25710/93-U 19930518 [1993JP-U025710]
- JP 65784/93-U 19931209 [1993JP-U065784]
IC - F04B-027/08

1/2 LEGALI - (C) LEGSTAT

PN - DE 69400347 [DE69400347]
DT - DE-P
ACTE- 19960905 DE/REF-P
CORRESPONDS TO
(EP 623745 19960905 [EP-623745])
- 19970116 DE/8373
TRANSLATION OF PATENT DOCUMENT OF EUROPEAN PATENT WAS RECEIVED AND HAS
BEEN PUBLISHED
- 19970828 DE/8364 [+]
NO OPPOSITION DURING TERM OF OPPOSITION
UP - 1997-35

2/2 LEGALI - (C) LEGSTAT

PN - EP 623745 [EP-623745]
AP - EP 94301704/94 19940310 [1994EP-0301704]
DT - EP-P
ACTE- 19940310 EP/AE-A
EP-APPLICATION
{EP 94301704/94 19940310 [1994EP-0301704]}
- 19941109 EP/AK-A2 [+]
DESIGNATED CONTRACTING STATES IN AN APPLICATION WITHOUT SEARCH REPORT:
DE FR GB IT SE
- 19941109 EP/A2 [+]
PUBLICATION OF APPLICATION WITHOUT SEARCH REPORT
- 19950118 EP/AK-A3 [+]
DESIGNATED CONTRACTING STATES IN A SEARCH REPORT:
DE FR GB IT SE
- 19950118 EP/A3 [+]
SEPARATE PUBLICATION OF THE SEARCH REPORT (ART. 93)
- 19950628 EP/17P [+]
REQUEST FOR EXAMINATION FILED
950426
- 19950712 EP/17Q [+]
FIRST EXAMINATION REPORT
950530
- 19951227 EP/AH-P
DIVISIONAL APPLICATION (ART. 76) IN:
(EP 688953 19951227 [EP-688953])
- 19960724 EP/RP1
PRIORITY (CORRECTION)

JP 930310 10140/93 U * JP 930312 10753/93 U * JP 930318 12092/93
 U * JP 930518 25710/93 U * JP 931209 65784/93 U

- 19960724 EP/XX
- MISCELLANEOUS:
- 19960731 EP/AK-B1 [+]
- DESIGNATED CONTRACTING STATES MENTIONED IN A PATENT SPECIFICATION:
 DE FR GB IT SE
- 19960731 EP/B1 [+]
- PATENT SPECIFICATION
- 19960905 EP/REF-P
- CORRESPONDS TO:
 (DE 69400347 19960905 [DE69400347])
- 19960906 EP/ET [+]
- FR: TRANSLATION FILED
- 19961001 EP/ITF [+]
- IT: TRANSLATION FOR A EP PATENT FILED
 JACOBACCI & PERANI S.P.A.
- 19970723 EP/26N [+]
- NO OPPOSITION FILED
- 19981118 EP/AH-P
- DIVISIONAL APPLICATION (ART. 76) IN:
 (EP 688953 19981118 [EP-688953])
- 19991101 EP/EUG [-]
- SE: EUROPEAN PATENT HAS LAPSED
 94301704.6
- 19991206 EP/EUG [-]
- SE: EUROPEAN PATENT HAS LAPSED
 94301704.6
- UP - 1999-49

4/37 INPADOC - (C) INPADOC

PN - DE 69402994 C0 19970612 [DE69402994]
 TI - DRUCKGERAET MIT SPARSAMER NUTZUNG DES DRUCKUEBERTRAGUNGSMATERIALS
 IN - NAKASHIMA TAKASHI [JP]; NAKAMURA ICHIRO [JP]
 PA - SHARP KK [JP]
 AP - DE 69402994/94-A 19940125 [1994DE-6002994]
 PR - JP 10140/93-A 19930125 [1993JP-0010140]
 IC - B41J-033/54

1/2 LEGALI - (C) LEGSTAT

PN - DE 69402994 [DE69402994]
 DT - DE-P
 ACTE- 19970612 DE/REF-P
 CORRESPONDS TO
 (EP 608839 19970612 [EP-608839])

- 19971218 DE/8373
- TRANSLATION OF PATENT DOCUMENT OF EUROPEAN PATENT WAS RECEIVED AND HAS
 BEEN PUBLISHED
- 19980604 DE/8364 [+]
- NO OPPOSITION DURING TERM OF OPPOSITION
- UP - 1998-23

2/2 LEGALI - (C) LEGSTAT

PN - EP 608839 [EP-608839]
 AP - EP 94101068/94 19940125 [1994EP-0101068]
 DT - EP-P
 ACTE- 19940125 EP/AE-A

EP-APPLICATION
 {EP 94101068/94 19940125 [1994EP-0101068]]
 - 19940803 EP/AK-A2 [+]
 DESIGNATED CONTRACTING STATES IN AN APPLICATION WITHOUT SEARCH REPORT:
 DE GB
 - 19940803 EP/A2 [+]
 PUBLICATION OF APPLICATION WITHOUT SEARCH REPORT
 - 19940914 EP/AK-A3 [+]
 DESIGNATED CONTRACTING STATES IN A SEARCH REPORT:
 DE GB
 - 19940914 EP/A3 [+]
 SEPARATE PUBLICATION OF THE SEARCH REPORT (ART. 93)
 - 19950215 EP/17P [+]
 REQUEST FOR EXAMINATION FILED
 941214
 - 19960228 EP/17Q [+]
 FIRST EXAMINATION REPORT
 960112
 - 19970507 EP/AK-B1 [+]
 DESIGNATED CONTRACTING STATES MENTIONED IN A PATENT SPECIFICATION:
 DE GB
 - 19970507 EP/B1 [+]
 PATENT SPECIFICATION
 - 19970612 EP/REF-P
 CORRESPONDS TO:
 (DE 69402994 19970612 [DE69402994])
 - 19980429 EP/26N [+]
 NO OPPOSITION FILED
 UP - 1998-18

5/37 INPADOC - (C) INPADOC
 PN - DE 4404637 C2 19970710 [DE4404637]
 TI - AXIALLAGERAUFBAU EINES TAUMELSCHEIBEN-KOMPRESSORS
 IN - IKEDA HAYATO [JP]; MORI HIDEO [JP]; NAKAJIMA TOSHIYUKI [JP]; TAKEMOTO
 SHOJI [JP]
 PA - TOYODA AUTOMATIC LOOM WORKS [JP]
 AP - DE 4404637/94-A 19940214 [1994DE-4404637]
 PR - JP 25710/93-A 19930215 [1993JP-0025710]
 IC - F04B-039/00; F16C-033/58

1/1 LEGALI - (C) LEGSTAT
 PN - DE 4404637 [DE4404637]
 AP - DE 4404637/94 19940214 [1994DE-4404637]
 DT - DE-P
 ACTE- 19940214 DE/AE-A
 DOMESTIC APPLICATION (PATENT APPLICATION)
 {DE 4404637/94 19940214 [1994DE-4404637]]
 - 19940818 DE/A1 [+]
 LAYING OPEN FOR PUBLIC INSPECTION
 - 19940818 DE/OP8 [+]
 REQUEST FOR EXAMINATION AS TO PARAGRAPH 44 PATENT LAW
 - 19970710 DE/D2 [+]
 GRANT AFTER EXAMINATION
 - 19980115 DE/8364 [+]
 NO OPPOSITION DURING TERM OF OPPOSITION
 UP - 1998-10

6/37 INPADOC - (C) INPADOC

PN - DE 69402994 T2 19971218 [DE69402994]
TI - DRUCKGERAET MIT SPARSAMER NUTZUNG DES DRUCKUEBERTRAGUNGSMATERIALS
IN - NAKASHIMA TAKASHI [JP]; NAKAMURA ICHIRO [JP]
PA - SHARP KK [JP]
AP - DE 69402994/94-A 19940125 [1994DE-6002994]
PR - JP 10140/93-A 19930125 [1993JP-0010140]
IC - B41J-033/54

1/2 LEGALI - (C) LEGSTAT

PN - DE 69402994 [DE69402994]

DT - DE-P

ACTE- 19970612 DE/REF-P

CORRESPONDS TO

(EP 608839 19970612 [EP-608839])

- 19971218 DE/8373

TRANSLATION OF PATENT DOCUMENT OF EUROPEAN PATENT WAS RECEIVED AND HAS
BEEN PUBLISHED

- 19980604 DE/8364 [+]

NO OPPOSITION DURING TERM OF OPPOSITION

UP - 1998-23

2/2 LEGALI - (C) LEGSTAT

PN - EP 608839 [EP-608839]

AP - EP 94101068/94 19940125 [1994EP-0101068]

DT - EP-P

ACTE- 19940125 EP/AE-A

EP-APPLICATION

{EP 94101068/94 19940125 [1994EP-0101068]}

- 19940803 EP/AK-A2 [+]

DESIGNATED CONTRACTING STATES IN AN APPLICATION WITHOUT SEARCH REPORT:

DE GB

- 19940803 EP/A2 [+]

PUBLICATION OF APPLICATION WITHOUT SEARCH REPORT

- 19940914 EP/AK-A3 [+]

DESIGNATED CONTRACTING STATES IN A SEARCH REPORT:

DE GB

- 19940914 EP/A3 [+]

SEPARATE PUBLICATION OF THE SEARCH REPORT (ART. 93)

- 19950215 EP/17P [+]

REQUEST FOR EXAMINATION FILED

941214

- 19960228 EP/17Q [+]

FIRST EXAMINATION REPORT

960112

- 19970507 EP/AK-B1 [+]

DESIGNATED CONTRACTING STATES MENTIONED IN A PATENT SPECIFICATION:

DE GB

- 19970507 EP/B1 [+]

PATENT SPECIFICATION

- 19970612 EP/REF-P

CORRESPONDS TO:

(DE 69402994 19970612 [DE69402994])

- 19980429 EP/26N [+]

NO OPPOSITION FILED

UP - 1998-18

7/37 INPADOC - (C) INPADOC

PN - DE 69414697 C0 19981224 [DE69414697]
TI - SCHIEFSCHLEIBENVERDICHTER MIT SCHMIERVORRICHTUNG FUER GLEITSCHUH UND
SCHIEFSCHLEIBE
IN - OGURA TOSHIYUKI [JP]; SAITO KENJI [JP]; SHIMIZU SHIGEMI [JP]; SAKAKI
MASAKATSU [JP]
PA - SANDEN CORP [JP]
AP - DE 69414697/94-A 19940310 [1994DE-6014697]
PR - JP 10140/93-U 19930310 [1993JP-U010140]
- JP 10753/93-U 19930312 [1993JP-U010753]
- JP 12092/93-U 19930318 [1993JP-U012092]
- JP 25710/93-U 19930518 [1993JP-U025710]
- JP 65784/93-U 19931209 [1993JP-U065784]
IC - F04B-027/08; F04B-001/14; F04B-039/02

1/2 LEGALI - (C) LEGSTAT

PN - DE 69414697 [DE69414697]
DT - DE-P
ACTE- 19981224 DE/REF-P
CORRESPONDS TO
(EP 688953 19981224 [EP-688953])
- 19990429 DE/8373
TRANSLATION OF PATENT DOCUMENT OF EUROPEAN PATENT WAS RECEIVED AND HAS
BEEN PUBLISHED
- 19991216 DE/8364 [+]
NO OPPOSITION DURING TERM OF OPPOSITION
UP - 1999-50

2/2 LEGALI - (C) LEGSTAT

PN - EP 688953 [EP-688953]
AP - EP 95114645/95 19940310 [1995EP-0114645]
DT - EP-P
ACTE- 19940310 EP/AE-A
EP-APPLICATION
(EP 95114645/95 19940310 [1995EP-0114645])
- 19951227 EP/AC-P
DIVISIONAL APPLICATION (ART. 76) OF:
(EP 623745 19951227 [EP-623745])
- 19951227 EP/AK-A2 [+]
DESIGNATED CONTRACTING STATES IN AN APPLICATION WITHOUT SEARCH REPORT:
DE FR GB IT SE
- 19951227 EP/A2 [+]
PUBLICATION OF APPLICATION WITHOUT SEARCH REPORT
- 19960515 EP/AK-A3 [+]
DESIGNATED CONTRACTING STATES IN A SEARCH REPORT:
DE FR GB IT SE
- 19960515 EP/A3 [+]
SEPARATE PUBLICATION OF THE SEARCH REPORT (ART. 93)
- 19970108 EP/17P [+]
REQUEST FOR EXAMINATION FILED
961101
- 19970305 EP/17Q [+]
FIRST EXAMINATION REPORT
970117
- 19981118 EP/AC-P
DIVISIONAL APPLICATION (ART. 76) OF:
(EP 623745 19981118 [EP-623745])

- 19981118 EP/AK-B1 [+]
 - DESIGNATED CONTRACTING STATES MENTIONED IN A PATENT SPECIFICATION:
 - DE FR GB IT SE
- 19981118 EP/B1 [+]
 - PATENT SPECIFICATION
- 19981224 EP/REF-P
 - CORRESPONDS TO:
 - (DE 69414697 19981224 [DE69414697])
- 19990119 EP/ITF [+]
 - IT: TRANSLATION FOR A EP PATENT FILED
 - JACOBACCI & PERANI S.P.A.
- 19990212 EP/ET [+]
 - FR: TRANSLATION FILED
- 19991101 EP/EUG [-]
 - SE: EUROPEAN PATENT HAS LAPSED
 - 95114645.5
- 19991110 EP/26N [+]
 - NO OPPOSITION FILED
- 19991206 EP/EUG [-]
 - SE: EUROPEAN PATENT HAS LAPSED
 - 95114645.5
- 20011219 EP/25 [-]
 - LAPSED AS TO RULE 92 1 P
 - <SE 99.03.11>
- UP - 2001-51

8/37 INPADOC - (C) INPADOC

PN - DE 69414697 T2 19990429 [DE69414697]

TI - SCHIEFSCHIEBENVERDICHTER MIT SCHMIERVORRICHTUNG FUER GLEITSCHUH UND SCHIEFSCHIEBE

IN - OGURA TOSHIYUKI [JP]; SAITO KENJI [JP]; SHIMIZU SHIGEMI [JP]; SAKAKI MASAKATSU [JP]

PA - SANDEN CORP [JP]

AP - DE 69414697/94-A 19940310 [1994DE-6014697]

PR - JP 10140/93-U 19930310 [1993JP-U010140]

- JP 10753/93-U 19930312 [1993JP-U010753]

- JP 12092/93-U 19930318 [1993JP-U012092]

- JP 25710/93-U 19930518 [1993JP-U025710]

- JP 65784/93-U 19931209 [1993JP-U065784]

IC - F04B-027/08; F04B-001/14; F04B-039/02

1/2 LEGALI - (C) LEGSTAT

PN - DE 69414697 [DE69414697]

DT - DE-P

ACTE- 19981224 DE/REF-P

CORRESPONDS TO

(EP 688953 19981224 [EP-688953])

- 19990429 DE/8373

TRANSLATION OF PATENT DOCUMENT OF EUROPEAN PATENT WAS RECEIVED AND HAS BEEN PUBLISHED

- 19991216 DE/8364 [+]

NO OPPOSITION DURING TERM OF OPPOSITION

UP - 1999-50

2/2 LEGALI - (C) LEGSTAT

PN - EP 688953 [EP-688953]

AP - EP 95114645/95 19940310 [1995EP-0114645]

DT - EP-P
 ACTE- 19940310 EP/AE-A
 EP-APPLICATION
 {EP 95114645/95 19940310 [1995EP-0114645]]
 - 19951227 EP/AC-P
 DIVISIONAL APPLICATION (ART. 76) OF:
 (EP 623745 19951227 [EP-623745])
 - 19951227 EP/AK-A2 [+]
 DESIGNATED CONTRACTING STATES IN AN APPLICATION WITHOUT SEARCH REPORT:
 DE FR GB IT SE
 - 19951227 EP/A2 [+]
 PUBLICATION OF APPLICATION WITHOUT SEARCH REPORT
 - 19960515 EP/AK-A3 [+]
 DESIGNATED CONTRACTING STATES IN A SEARCH REPORT:
 DE FR GB IT SE
 - 19960515 EP/A3 [+]
 SEPARATE PUBLICATION OF THE SEARCH REPORT (ART. 93)
 - 19970108 EP/17P [+]
 REQUEST FOR EXAMINATION FILED
 961101
 - 19970305 EP/17Q [+]
 FIRST EXAMINATION REPORT
 970117
 - 19981118 EP/AC-P
 DIVISIONAL APPLICATION (ART. 76) OF:
 (EP 623745 19981118 [EP-623745])
 - 19981118 EP/AK-B1 [+]
 DESIGNATED CONTRACTING STATES MENTIONED IN A PATENT SPECIFICATION:
 DE FR GB IT SE
 - 19981118 EP/B1 [+]
 PATENT SPECIFICATION
 - 19981224 EP/REF-P
 CORRESPONDS TO:
 (DE 69414697 19981224 [DE69414697])
 - 19990119 EP/ITF [+]
 IT: TRANSLATION FOR A EP PATENT FILED
 JACOBACCI & PERANI S.P.A.
 - 19990212 EP/ET [+]
 FR: TRANSLATION FILED
 - 19991101 EP/EUG [-]
 SE: EUROPEAN PATENT HAS LAPSED
 95114645.5
 - 19991110 EP/26N [+]
 NO OPPOSITION FILED
 - 19991206 EP/EUG [-]
 SE: EUROPEAN PATENT HAS LAPSED
 95114645.5
 - 20011219 EP/25 [-]
 LAPSED AS TO RULE 92 1 P
 <SE 99.03.11>
 UP - 2001-51

9/37 INPADOC - (C) INPADOC
 PN - EP 608839 A2 19940803 [EP-608839]
 TI - PRINTING APPARATUS WHICH CAN USE PRINTING TRANSFER MATERIAL
 EFFECTIVELY.
 LA - ENG
 IN - NAKASHIMA TAKASHI [JP]; NAKAMURA ICHIRO [JP]

PA - SHARP KK [JP]
AP - EP 94101068/94-A 19940125 [1994EP-0101068]
PR - JP 10140/93-A 19930125 [1993JP-0010140]
IC - B41J-033/54
DS - DE* GB*

1/2 LEGALI - (C) LEGSTAT

PN - DE 69402994 [DE69402994]

DT - DE-P

ACTE- 19970612 DE/REF-P

CORRESPONDS TO

(EP 608839 19970612 [EP-608839])

- 19971218 DE/8373

TRANSLATION OF PATENT DOCUMENT OF EUROPEAN PATENT WAS RECEIVED AND HAS
BEEN PUBLISHED

- 19980604 DE/8364 [+]

NO OPPOSITION DURING TERM OF OPPOSITION

UP - 1998-23

2/2 LEGALI - (C) LEGSTAT

PN - EP 608839 [EP-608839]

AP - EP 94101068/94 19940125 [1994EP-0101068]

DT - EP-P

ACTE- 19940125 EP/AE-A

EP-APPLICATION

{EP 94101068/94 19940125 [1994EP-0101068]}

- 19940803 EP/AK-A2 [+]

DESIGNATED CONTRACTING STATES IN AN APPLICATION WITHOUT SEARCH REPORT:
DE GB

- 19940803 EP/A2 [+]

PUBLICATION OF APPLICATION WITHOUT SEARCH REPORT

- 19940914 EP/AK-A3 [+]

DESIGNATED CONTRACTING STATES IN A SEARCH REPORT:
DE GB

- 19940914 EP/A3 [+]

SEPARATE PUBLICATION OF THE SEARCH REPORT (ART. 93)

- 19950215 EP/17P [+]

REQUEST FOR EXAMINATION FILED

941214

- 19960228 EP/17Q [+]

FIRST EXAMINATION REPORT

960112

- 19970507 EP/AK-B1 [+]

DESIGNATED CONTRACTING STATES MENTIONED IN A PATENT SPECIFICATION:
DE GB

- 19970507 EP/B1 [+]

PATENT SPECIFICATION

- 19970612 EP/REF-P

CORRESPONDS TO:

(DE 69402994 19970612 [DE69402994])

- 19980429 EP/26N [+]

NO OPPOSITION FILED

UP - 1998-18

10/37 INPADOC - (C) INPADOC

PN - EP 608839 A3 19940914 [EP-608839]

TI - PRINTING APPARATUS WHICH CAN USE PRINTING TRANSFER MATERIAL

EFFECTIVELY.

LA - ENG
IN - NAKASHIMA TAKASHI [JP]; NAKAMURA ICHIRO [JP]
PA - SHARP KK [US]
AP - EP 94101068/94-A 19940125 [1994EP-0101068]
PR - JP 10140/93-A 19930125 [1993JP-0010140]
IC - B41J-033/54
DS - DE* GB*

1/2 LEGALI - (C) LEGSTAT

PN - DE 69402994 [DE69402994]

DT - DE-P

ACTE- 19970612 DE/REF-P

CORRESPONDS TO

(EP 608839 19970612 [EP-608839])

- 19971218 DE/8373

TRANSLATION OF PATENT DOCUMENT OF EUROPEAN PATENT WAS RECEIVED AND HAS BEEN PUBLISHED

- 19980604 DE/8364 [+]

NO OPPOSITION DURING TERM OF OPPOSITION

UP - 1998-23

2/2 LEGALI - (C) LEGSTAT

PN - EP 608839 [EP-608839]

AP - EP 94101068/94 19940125 [1994EP-0101068]

DT - EP-P

ACTE- 19940125 EP/AE-A

EP-APPLICATION

{EP 94101068/94 19940125 [1994EP-0101068]}

- 19940803 EP/AK-A2 [+]

DESIGNATED CONTRACTING STATES IN AN APPLICATION WITHOUT SEARCH REPORT:
DE GB

- 19940803 EP/A2 [+]

PUBLICATION OF APPLICATION WITHOUT SEARCH REPORT

- 19940914 EP/AK-A3 [+]

DESIGNATED CONTRACTING STATES IN A SEARCH REPORT:

DE GB

- 19940914 EP/A3 [+]

SEPARATE PUBLICATION OF THE SEARCH REPORT (ART. 93)

- 19950215 EP/17P [+]

REQUEST FOR EXAMINATION FILED
941214

- 19960228 EP/17Q [+]

FIRST EXAMINATION REPORT
960112

- 19970507 EP/AK-B1 [+]

DESIGNATED CONTRACTING STATES MENTIONED IN A PATENT SPECIFICATION:
DE GB

- 19970507 EP/B1 [+]

PATENT SPECIFICATION

- 19970612 EP/REF-P

CORRESPONDS TO:

(DE 69402994 19970612 [DE69402994])

- 19980429 EP/26N [+]

NO OPPOSITION FILED

UP - 1998-18

11/37 INPADOC - (C) INPADOC
 PN - EP 623745 A2 19941109 [EP-623745]
 TI - SWASH PLATE TYPE COMPRESSOR WITH LUBRICATING MECHANISM OF SHOE AND SWASH PLATE.
 IN - OGURA TOSHIYUKI C O SANDEN COR [JP]; SHIMIZU SHIGEMI C O SANDEN COR [JP]; SAITO KENJI C O SANDEN CORPORA [JP]; SAKAKI MASAKATSU C O SANDEN CO [JP]
 PA - SANDEN CORP [JP]
 AP - EP 94301704/94-A 19940310 [1994EP-0301704]
 PR - JP 10140/93-U 19930310 [1993JP-U010140]
 - JP 10753/93-U 19930312 [1993JP-U010753]
 - JP 12092/93-U 19930318 [1993JP-U012092]
 - JP 25710/93-U 19930518 [1993JP-U025710]
 - JP 65784/93-U 19931209 [1993JP-U065784]
 IC - F04B-027/08
 DS - DE* FR* GB* IT* SE*

1/3 LEGALI - (C) LEGSTAT
 PN - DE 69400347 [DE69400347]
 DT - DE-P
 ACTE- 19960905 DE/REF-P
 CORRESPONDS TO
 (EP 623745 19960905 [EP-623745])
 - 19970116 DE/8373
 TRANSLATION OF PATENT DOCUMENT OF EUROPEAN PATENT WAS RECEIVED AND HAS BEEN PUBLISHED
 - 19970828 DE/8364 [+]
 NO OPPOSITION DURING TERM OF OPPOSITION
 UP - 1997-35

2/3 LEGALI - (C) LEGSTAT
 PN - EP 688953 [EP-688953]
 AP - EP 95114645/95 19940310 [1995EP-0114645]
 DT - EP-P
 ACTE- 19940310 EP/AE-A
 EP-APPLICATION
 {EP 95114645/95 19940310 [1995EP-0114645]}
 - 19951227 EP/AC-P
 DIVISIONAL APPLICATION (ART. 76) OF:
 (EP 623745 19951227 [EP-623745])
 - 19951227 EP/AK-A2 [+]
 DESIGNATED CONTRACTING STATES IN AN APPLICATION WITHOUT SEARCH REPORT:
 DE FR GB IT SE
 - 19951227 EP/A2 [+]
 PUBLICATION OF APPLICATION WITHOUT SEARCH REPORT
 - 19960515 EP/AK-A3 [+]
 DESIGNATED CONTRACTING STATES IN A SEARCH REPORT:
 DE FR GB IT SE
 - 19960515 EP/A3 [+]
 SEPARATE PUBLICATION OF THE SEARCH REPORT (ART. 93)
 - 19970108 EP/17P [+]
 REQUEST FOR EXAMINATION FILED
 961101
 - 19970305 EP/17Q [+]
 FIRST EXAMINATION REPORT
 970117
 - 19981118 EP/AC-P
 DIVISIONAL APPLICATION (ART. 76) OF:

(EP 623745 19981118 [EP-623745])

- 19981118 EP/AK-B1 [+]
 - DESIGNATED CONTRACTING STATES MENTIONED IN A PATENT SPECIFICATION:
 - DE FR GB IT SE
- 19981118 EP/B1 [+]
 - PATENT SPECIFICATION
- 19981224 EP/REF-P
 - CORRESPONDS TO:
 - (DE 69414697 19981224 [DE69414697])
- 19990119 EP/ITF [+]
 - IT: TRANSLATION FOR A EP PATENT FILED
 - JACOBACCI & PERANI S.P.A.
- 19990212 EP/ET [+]
 - FR: TRANSLATION FILED
- 19991101 EP/EUG [-]
 - SE: EUROPEAN PATENT HAS LAPSED
 - 95114645.5
- 19991110 EP/26N [+]
 - NO OPPOSITION FILED
- 19991206 EP/EUG [-]
 - SE: EUROPEAN PATENT HAS LAPSED
 - 95114645.5
- 20011219 EP/25 [-]
 - LAPSED AS TO RULE 92 1 P
 - <SE 99.03.11>

UP - 2001-51

3/3 LEGALI - (C) LEGSTAT

PN - EP 623745 [EP-623745]

AP - EP 94301704/94 19940310 [1994EP-0301704]

DT - EP-P

ACTE- 19940310 EP/AE-A

- EP-APPLICATION
- {EP 94301704/94 19940310 [1994EP-0301704]}
- 19941109 EP/AK-A2 [+]
 - DESIGNATED CONTRACTING STATES IN AN APPLICATION WITHOUT SEARCH REPORT:
 - DE FR GB IT SE
- 19941109 EP/A2 [+]
 - PUBLICATION OF APPLICATION WITHOUT SEARCH REPORT
- 19950118 EP/AK-A3 [+]
 - DESIGNATED CONTRACTING STATES IN A SEARCH REPORT:
 - DE FR GB IT SE
- 19950118 EP/A3 [+]
 - SEPARATE PUBLICATION OF THE SEARCH REPORT (ART. 93)
- 19950628 EP/17P [+]
 - REQUEST FOR EXAMINATION FILED
 - 950426
- 19950712 EP/17Q [+]
 - FIRST EXAMINATION REPORT
 - 950530
- 19951227 EP/AH-P
 - DIVISIONAL APPLICATION (ART. 76) IN:
 - (EP 688953 19951227 [EP-688953])
- 19960724 EP/RPR1
 - PRIORITY (CORRECTION)
 - JP 930310 10140/93 U * JP 930312 10753/93 U * JP 930318 12092/93
 - U * JP 930518 25710/93 U * JP 931209 65784/93 U
- 19960724 EP/XX
 - MISCELLANEOUS:

- 19960731 EP/AK-B1 [+]
 - DESIGNATED CONTRACTING STATES MENTIONED IN A PATENT SPECIFICATION:
 - DE FR GB IT SE
- 19960731 EP/B1 [+]
 - PATENT SPECIFICATION
- 19960905 EP/REF-P
 - CORRESPONDS TO:
 - (DE 69400347 19960905 [DE69400347])
- 19960906 EP/ET [+]
 - FR: TRANSLATION FILED
- 19961001 EP/ITF [+]
 - IT: TRANSLATION FOR A EP PATENT FILED
 - JACOBACCI & PERANI S.P.A.
- 19970723 EP/26N [+]
 - NO OPPOSITION FILED
- 19981118 EP/AH-P
 - DIVISIONAL APPLICATION (ART. 76) IN:
 - (EP 688953 19981118 [EP-688953])
- 19991101 EP/EUG [-]
 - SE: EUROPEAN PATENT HAS LAPSED
 - 94301704.6
- 19991206 EP/EUG [-]
 - SE: EUROPEAN PATENT HAS LAPSED
 - 94301704.6
- UP - 1999-49

12/37 INPADOC - (C) INPADOC

PN - EP 623745 A3 19950118 [EP-623745]

TI - SWASH PLATE TYPE COMPRESSOR WITH LUBRICATING MECHANISM OF SHOE AND SWASH PLATE.

IN - OGURA TOSHIYUKI C O SANDEN COR [JP]; SHIMIZU SHIGEMI C O SANDEN COR [JP]; SAITO KENJI C O SANDEN CORPORA [JP]; SAKAKI MASAKATSU C O SANDEN CO [JP]

PA - SANDEN CORP [JP]

AP - EP 94301704/94-A 19940310 [1994EP-0301704]

PR - JP 10140/93-U 19930310 [1993JP-U010140]

- JP 10753/93-U 19930312 [1993JP-U010753]

- JP 12092/93-U 19930318 [1993JP-U012092]

- JP 25710/93-U 19930518 [1993JP-U025710]

- JP 65784/93-U 19931209 [1993JP-U065784]

IC - F04B-027/08

DS - DE* FR* GB* IT* SE*

1/3 LEGALI - (C) LEGSTAT

PN - DE 69400347 [DE69400347]

DT - DE-P

ACTE- 19960905 DE/REF-P

CORRESPONDS TO

(EP 623745 19960905 [EP-623745])

- 19970116 DE/8373

TRANSLATION OF PATENT DOCUMENT OF EUROPEAN PATENT WAS RECEIVED AND HAS BEEN PUBLISHED

- 19970828 DE/8364 [+]

NO OPPOSITION DURING TERM OF OPPOSITION

UP - 1997-35

2/3 LEGALI - (C) LEGSTAT

PN - EP 688953 [EP-688953]
 AP - EP 95114645/95 19940310 [1995EP-0114645]
 DT - EP-P
 ACTE- 19940310 EP/AE-A
 EP-APPLICATION
 {EP 95114645/95 19940310 [1995EP-0114645]}
 - 19951227 EP/AC-P
 DIVISIONAL APPLICATION (ART. 76) OF:
 {EP 623745 19951227 [EP-623745]}
 - 19951227 EP/AK-A2 [+]
 DESIGNATED CONTRACTING STATES IN AN APPLICATION WITHOUT SEARCH REPORT:
 DE FR GB IT SE
 - 19951227 EP/A2 [+]
 PUBLICATION OF APPLICATION WITHOUT SEARCH REPORT
 - 19960515 EP/AK-A3 [+]
 DESIGNATED CONTRACTING STATES IN A SEARCH REPORT:
 DE FR GB IT SE
 - 19960515 EP/A3 [+]
 SEPARATE PUBLICATION OF THE SEARCH REPORT (ART. 93)
 - 19970108 EP/17P [+]
 REQUEST FOR EXAMINATION FILED
 961101
 - 19970305 EP/17Q [+]
 FIRST EXAMINATION REPORT
 970117
 - 19981118 EP/AC-P
 DIVISIONAL APPLICATION (ART. 76) OF:
 {EP 623745 19981118 [EP-623745]}
 - 19981118 EP/AK-B1 [+]
 DESIGNATED CONTRACTING STATES MENTIONED IN A PATENT SPECIFICATION:
 DE FR GB IT SE
 - 19981118 EP/B1 [+]
 PATENT SPECIFICATION
 - 19981224 EP/REF-P
 CORRESPONDS TO:
 {DE 69414697 19981224 [DE69414697]}
 - 19990119 EP/ITF [+]
 IT: TRANSLATION FOR A EP PATENT FILED
 JACOBACCI & PERANI S.P.A.
 - 19990212 EP/ET [+]
 FR: TRANSLATION FILED
 - 19991101 EP/EUG [-]
 SE: EUROPEAN PATENT HAS LAPSED
 95114645.5
 - 19991110 EP/26N [+]
 NO OPPOSITION FILED
 - 19991206 EP/EUG [-]
 SE: EUROPEAN PATENT HAS LAPSED
 95114645.5
 - 20011219 EP/25 [-]
 LAPSED AS TO RULE 92 1 P
 <SE 99.03.11>
 UP - 2001-51

3/3 LEGALI - (C) LEGSTAT

PN - EP 623745 [EP-623745]
 AP - EP 94301704/94 19940310 [1994EP-0301704]
 DT - EP-P
 ACTE- 19940310 EP/AE-A

EP-APPLICATION
 {EP 94301704/94 19940310 [1994EP-0301704]}

- 19941109 EP/AK-A2 [+]
 - DESIGNATED CONTRACTING STATES IN AN APPLICATION WITHOUT SEARCH REPORT:
 - DE FR GB IT SE
- 19941109 EP/A2 [+]
 - PUBLICATION OF APPLICATION WITHOUT SEARCH REPORT
- 19950118 EP/AK-A3 [+]
 - DESIGNATED CONTRACTING STATES IN A SEARCH REPORT:
 - DE FR GB IT SE
- 19950118 EP/A3 [+]
 - SEPARATE PUBLICATION OF THE SEARCH REPORT (ART. 93)
- 19950628 EP/17P [+]
 - REQUEST FOR EXAMINATION FILED
 - 950426
- 19950712 EP/17Q [+]
 - FIRST EXAMINATION REPORT
 - 950530
- 19951227 EP/AH-P
 - DIVISIONAL APPLICATION (ART. 76) IN:
 - (EP 688953 19951227 [EP-688953])
- 19960724 EP/RPR1
 - PRIORITY (CORRECTION)
 - JP 930310 10140/93 U * JP 930312 10753/93 U * JP 930318 12092/93
 - U * JP 930518 25710/93 U * JP 931209 65784/93 U
- 19960724 EP/XX
 - MISCELLANEOUS:
- 19960731 EP/AK-B1 [+]
 - DESIGNATED CONTRACTING STATES MENTIONED IN A PATENT SPECIFICATION:
 - DE FR GB IT SE
- 19960731 EP/B1 [+]
 - PATENT SPECIFICATION
- 19960905 EP/REF-P
 - CORRESPONDS TO:
 - (DE 69400347 19960905 [DE69400347])
- 19960906 EP/ET [+]
 - FR: TRANSLATION FILED
- 19961001 EP/ITF [+]
 - IT: TRANSLATION FOR A EP PATENT FILED
 - JACOBACCI & PERANI S.P.A.
- 19970723 EP/26N [+]
 - NO OPPOSITION FILED
- 19981118 EP/AH-P
 - DIVISIONAL APPLICATION (ART. 76) IN:
 - (EP 688953 19981118 [EP-688953])
- 19991101 EP/EUG [-]
 - SE: EUROPEAN PATENT HAS LAPSED
 - 94301704.6
- 19991206 EP/EUG [-]
 - SE: EUROPEAN PATENT HAS LAPSED
 - 94301704.6
- UP - 1999-49

13/37 INPADOC - (C) INPADOC
 PN - EP 688953 A2 19951227 [EP-688953]
 TI - SWASH PLATE TYPE COMPRESSOR WITH LUBRICATING MECHANISM BETWEEN THE
 SHOE AND SWASH PLATE
 LA - ENG

IN - OGURA TOSHIYUKI [JP]; SAITO KENJI [JP]; SHIMIZU SHIGEMI [JP]; SAKAKI
MASAKATSU [JP]
PA - SANDEN CORP [JP]
AP - EP 95114645/95-A 19940310 [1995EP-0114645]
PR - EP 94301704/94-A3 19940310 [1994EP-0301704]
- JP 10140/93-U 19930310 [1993JP-U010140]
- JP 10753/93-U 19930312 [1993JP-U010753]
- JP 12092/93-U 19930318 [1993JP-U012092]
- JP 25710/93-U 19930518 [1993JP-U025710]
- JP 65784/93-U 19931209 [1993JP-U065784]
IC - F04B-027/08
DS - DE* FR* GB* IT* SE*

1/3 LEGALI - (C) LEGSTAT

PN - DE 69414697 [DE69414697]
DT - DE-P
ACTE- 19981224 DE/REF-P
CORRESPONDS TO
(EP 688953 19981224 [EP-688953])
- 19990429 DE/8373
TRANSLATION OF PATENT DOCUMENT OF EUROPEAN PATENT WAS RECEIVED AND HAS
BEEN PUBLISHED
- 19991216 DE/8364 [+]
NO OPPOSITION DURING TERM OF OPPOSITION
UP - 1999-50

2/3 LEGALI - (C) LEGSTAT

PN - EP 688953 [EP-688953]
AP - EP 95114645/95 19940310 [1995EP-0114645]
DT - EP-P
ACTE- 19940310 EP/AE-A
EP-APPLICATION
(EP 95114645/95 19940310 [1995EP-0114645])
- 19951227 EP/AC-P
DIVISIONAL APPLICATION (ART. 76) OF:
(EP 623745 19951227 [EP-623745])
- 19951227 EP/AK-A2 [+]
DESIGNATED CONTRACTING STATES IN AN APPLICATION WITHOUT SEARCH REPORT:
DE FR GB IT SE
- 19951227 EP/A2 [+]
PUBLICATION OF APPLICATION WITHOUT SEARCH REPORT
- 19960515 EP/AK-A3 [+]
DESIGNATED CONTRACTING STATES IN A SEARCH REPORT:
DE FR GB IT SE
- 19960515 EP/A3 [+]
SEPARATE PUBLICATION OF THE SEARCH REPORT (ART. 93)
- 19970108 EP/17P [+]
REQUEST FOR EXAMINATION FILED
961101
- 19970305 EP/17Q [+]
FIRST EXAMINATION REPORT
970117
- 19981118 EP/AC-P
DIVISIONAL APPLICATION (ART. 76) OF:
(EP 623745 19981118 [EP-623745])
- 19981118 EP/AK-B1 [+]
DESIGNATED CONTRACTING STATES MENTIONED IN A PATENT SPECIFICATION:
DE FR GB IT SE

- 19981118 EP/B1 [+]
 - PATENT SPECIFICATION
- 19981224 EP/REF-P
 - CORRESPONDS TO:
 - (DE 69414697 19981224 [DE69414697])
- 19990119 EP/ITF [+]
 - IT: TRANSLATION FOR A EP PATENT FILED
 - JACOBACCI & PERANI S.P.A.
- 19990212 EP/ET [+]
 - FR: TRANSLATION FILED
- 19991101 EP/EUG [-]
 - SE: EUROPEAN PATENT HAS LAPSED
 - 95114645.5
- 19991110 EP/26N [+]
 - NO OPPOSITION FILED
- 19991206 EP/EUG [-]
 - SE: EUROPEAN PATENT HAS LAPSED
 - 95114645.5
- 20011219 EP/25 [-]
 - LAPSED AS TO RULE 92 1 P
 - <SE 99.03.11>
- UP - 2001-51

3/3 LEGALI - (C) LEGSTAT

PN - EP 623745 [EP-623745]

AP - EP 94301704/94 19940310 [1994EP-0301704]

DT - EP-P

ACTE- 19940310 EP/AE-A

- EP-APPLICATION
- {EP 94301704/94 19940310 [1994EP-0301704]}

- 19941109 EP/AK-A2 [+]
 - DESIGNATED CONTRACTING STATES IN AN APPLICATION WITHOUT SEARCH REPORT:
 - DE FR GB IT SE
- 19941109 EP/A2 [+]
 - PUBLICATION OF APPLICATION WITHOUT SEARCH REPORT
- 19950118 EP/AK-A3 [+]
 - DESIGNATED CONTRACTING STATES IN A SEARCH REPORT:
 - DE FR GB IT SE
- 19950118 EP/A3 [+]
 - SEPARATE PUBLICATION OF THE SEARCH REPORT (ART. 93)
- 19950628 EP/17P [+]
 - REQUEST FOR EXAMINATION FILED
 - 950426
- 19950712 EP/17Q [+]
 - FIRST EXAMINATION REPORT
 - 950530
- 19951227 EP/AH-P
 - DIVISIONAL APPLICATION (ART. 76) IN:
 - (EP 688953 19951227 [EP-688953])
- 19960724 EP/RPR1
 - PRIORITY (CORRECTION)
 - JP 930310 10140/93 U * JP 930312 10753/93 U * JP 930318 12092/93
 - U * JP 930518 25710/93 U * JP 931209 65784/93 U
- 19960724 EP/XX
 - MISCELLANEOUS:
- 19960731 EP/AK-B1 [+]
 - DESIGNATED CONTRACTING STATES MENTIONED IN A PATENT SPECIFICATION:
 - DE FR GB IT SE
- 19960731 EP/B1 [+]
 -

PATENT SPECIFICATION

- 19960905 EP/REF-P
CORRESPONDS TO:
(DE 69400347 19960905 [DE69400347])
- 19960906 EP/ET [+]
FR: TRANSLATION FILED
- 19961001 EP/ITF [+]
IT: TRANSLATION FOR A EP PATENT FILED
JACOBACCI & PERANI S.P.A.
- 19970723 EP/26N [+]
NO OPPOSITION FILED
- 19981118 EP/AH-P
DIVISIONAL APPLICATION (ART. 76) IN:
(EP 688953 19981118 [EP-688953])
- 19991101 EP/EUG [-]
SE: EUROPEAN PATENT HAS LAPSED
94301704.6
- 19991206 EP/EUG [-]
SE: EUROPEAN PATENT HAS LAPSED
94301704.6
UP - 1999-49

14/37 INPADOC - (C) INPADOC

PN - EP 688953 A3 19960515 [EP-688953]
TI - SWASH PLATE TYPE COMPRESSOR WITH LUBRICATING MECHANISM BETWEEN THE
SHOE AND SWASH PLATE
LA - ENG
IN - OGURA TOSHIYUKI [JP]; SAITO KENJI [JP]; SHIMIZU SHIGEMI [JP]; SAKAKI
MASAKATSU [JP]
PA - SANDEN CORP [JP]
AP - EP 95114645/95-A 19940310 [1995EP-0114645]
PR - EP 94301704/94-A3 19940310 [1994EP-0301704]
- JP 10140/93-U 19930310 [1993JP-U010140]
- JP 10753/93-U 19930312 [1993JP-U010753]
- JP 12092/93-U 19930318 [1993JP-U012092]
- JP 25710/93-U 19930518 [1993JP-U025710]
- JP 65784/93-U 19931209 [1993JP-U065784]
IC - F04B-027/08
DS - DE* FR* GB* IT* SE*

1/3 LEGALI - (C) LEGSTAT

PN - DE 69414697 [DE69414697]
DT - DE-P
ACTE- 19981224 DE/REF-P
CORRESPONDS TO
(EP 688953 19981224 [EP-688953])
- 19990429 DE/8373
TRANSLATION OF PATENT DOCUMENT OF EUROPEAN PATENT WAS RECEIVED AND HAS
BEEN PUBLISHED
- 19991216 DE/8364 [+]
NO OPPOSITION DURING TERM OF OPPOSITION
UP - 1999-50

2/3 LEGALI - (C) LEGSTAT

PN - EP 688953 [EP-688953]
AP - EP 95114645/95 19940310 [1995EP-0114645]
DT - EP-P

ACTE- 19940310 EP/AE-A
 EP-APPLICATION
 {EP 95114645/95 19940310 [1995EP-0114645]}
 - 19951227 EP/AC-P
 DIVISIONAL APPLICATION (ART. 76) OF:
 (EP 623745 19951227 [EP-623745])
 - 19951227 EP/AK-A2 [+]
 DESIGNATED CONTRACTING STATES IN AN APPLICATION WITHOUT SEARCH REPORT:
 DE FR GB IT SE
 - 19951227 EP/A2 [+]
 PUBLICATION OF APPLICATION WITHOUT SEARCH REPORT
 - 19960515 EP/AK-A3 [+]
 DESIGNATED CONTRACTING STATES IN A SEARCH REPORT:
 DE FR GB IT SE
 - 19960515 EP/A3 [+]
 SEPARATE PUBLICATION OF THE SEARCH REPORT (ART. 93)
 - 19970108 EP/17P [+]
 REQUEST FOR EXAMINATION FILED
 961101
 - 19970305 EP/17Q [+]
 FIRST EXAMINATION REPORT
 970117
 - 19981118 EP/AC-P
 DIVISIONAL APPLICATION (ART. 76) OF:
 (EP 623745 19981118 [EP-623745])
 - 19981118 EP/AK-B1 [+]
 DESIGNATED CONTRACTING STATES MENTIONED IN A PATENT SPECIFICATION:
 DE FR GB IT SE
 - 19981118 EP/B1 [+]
 PATENT SPECIFICATION
 - 19981224 EP/REF-P
 CORRESPONDS TO:
 (DE 69414697 19981224 [DE69414697])
 - 19990119 EP/ITF [+]
 IT: TRANSLATION FOR A EP PATENT FILED
 JACOBACCI & PERANI S.P.A.
 - 19990212 EP/ET [+]
 FR: TRANSLATION FILED
 - 19991101 EP/EUG [-]
 SE: EUROPEAN PATENT HAS LAPSED
 95114645.5
 - 19991110 EP/26N [+]
 NO OPPOSITION FILED
 - 19991206 EP/EUG [-]
 SE: EUROPEAN PATENT HAS LAPSED
 95114645.5
 - 20011219 EP/25 [-]
 LAPSED AS TO RULE 92 1 P
 <SE 99.03.11>
 UP - 2001-51

3/3 LEGALI - (C) LEGSTAT
 PN - EP 623745 [EP-623745]
 AP - EP 94301704/94 19940310 [1994EP-0301704]
 DT - EP-P
 ACTE- 19940310 EP/AE-A
 EP-APPLICATION
 {EP 94301704/94 19940310 [1994EP-0301704]}
 - 19941109 EP/AK-A2 [+]

DESIGNATED CONTRACTING STATES IN AN APPLICATION WITHOUT SEARCH REPORT:
DE FR GB IT SE
- 19941109 EP/A2 [+]
PUBLICATION OF APPLICATION WITHOUT SEARCH REPORT
- 19950118 EP/AK-A3 [+]
DESIGNATED CONTRACTING STATES IN A SEARCH REPORT:
DE FR GB IT SE
- 19950118 EP/A3 [+]
SEPARATE PUBLICATION OF THE SEARCH REPORT (ART. 93)
- 19950628 EP/17P [+]
REQUEST FOR EXAMINATION FILED
950426
- 19950712 EP/17Q [+]
FIRST EXAMINATION REPORT
950530
- 19951227 EP/AH-P
DIVISIONAL APPLICATION (ART. 76) IN:
(EP 688953 19951227 [EP-688953])
- 19960724 EP/RPR1
PRIORITY (CORRECTION)
JP 930310 10140/93 U * JP 930312 10753/93 U * JP 930318 12092/93
U * JP 930518 25710/93 U * JP 931209 65784/93 U
- 19960724 EP/XX
MISCELLANEOUS:
- 19960731 EP/AK-B1 [+]
DESIGNATED CONTRACTING STATES MENTIONED IN A PATENT SPECIFICATION:
DE FR GB IT SE
- 19960731 EP/B1 [+]
PATENT SPECIFICATION
- 19960905 EP/REF-P
CORRESPONDS TO:
(DE 69400347 19960905 [DE69400347])
- 19960906 EP/ET [+]
FR: TRANSLATION FILED
- 19961001 EP/ITF [+]
IT: TRANSLATION FOR A EP PATENT FILED
JACOBACCI & PERANI S.P.A.
- 19970723 EP/26N [+]
NO OPPOSITION FILED
- 19981118 EP/AH-P
DIVISIONAL APPLICATION (ART. 76) IN:
(EP 688953 19981118 [EP-688953])
- 19991101 EP/EUG [-]
SE: EUROPEAN PATENT HAS LAPSED
94301704.6
- 19991206 EP/EUG [-]
SE: EUROPEAN PATENT HAS LAPSED
94301704.6
UP - 1999-49

15/37 INPADOC - (C) INPADOC
PN - EP 623745 B1 19960731 [EP-623745]
TI - SWASH PLATE TYPE COMPRESSOR WITH LUBRICATING MECHANISM OF SHOE AND
SWASH PLATE
LA - ENG
IN - OGURA TOSHIYUKI [JP]; SHIMIZU SHIGEMI [JP]; SAITO KENJI [JP]; SAKAKI
MASAKATSU [JP]
PA - SANDEN CORP [JP]

AP - EP 94301704/94-A 19940310 [1994EP-0301704]
PR - JP 10140/93-U 19930310 [1993JP-U010140]
- JP 10753/93-U 19930312 [1993JP-U010753]
- JP 12092/93-U 19930318 [1993JP-U012092]
- JP 25710/93-U 19930518 [1993JP-U025710]
- JP 65784/93-U 19931209 [1993JP-U065784]
IC - F04B-027/08
DS - DE* FR* GB* IT* SE*

1/3 LEGALI - (C) LEGSTAT

PN - DE 69400347 [DE69400347]

DT - DE-P

ACTE- 19960905 DE/REF-P

CORRESPONDS TO

(EP 623745 19960905 [EP-623745])

- 19970116 DE/8373

TRANSLATION OF PATENT DOCUMENT OF EUROPEAN PATENT WAS RECEIVED AND HAS
BEEN PUBLISHED

- 19970828 DE/8364 [+]

NO OPPOSITION DURING TERM OF OPPOSITION

UP - 1997-35

2/3 LEGALI - (C) LEGSTAT

PN - EP 688953 [EP-688953]

AP - EP 95114645/95 19940310 [1995EP-0114645]

DT - EP-P

ACTE- 19940310 EP/AE-A

EP-APPLICATION

{EP 95114645/95 19940310 [1995EP-0114645]}

- 19951227 EP/AC-P

DIVISIONAL APPLICATION (ART. 76) OF:

(EP 623745 19951227 [EP-623745])

- 19951227 EP/AK-A2 [+]

DESIGNATED CONTRACTING STATES IN AN APPLICATION WITHOUT SEARCH REPORT:
DE FR GB IT SE

- 19951227 EP/A2 [+]

PUBLICATION OF APPLICATION WITHOUT SEARCH REPORT

- 19960515 EP/AK-A3 [+]

DESIGNATED CONTRACTING STATES IN A SEARCH REPORT:

DE FR GB IT SE

- 19960515 EP/A3 [+]

SEPARATE PUBLICATION OF THE SEARCH REPORT (ART. 93)

- 19970108 EP/17P [+]

REQUEST FOR EXAMINATION FILED

961101

- 19970305 EP/17Q [+]

FIRST EXAMINATION REPORT

970117

- 19981118 EP/AC-P

DIVISIONAL APPLICATION (ART. 76) OF:

(EP 623745 19981118 [EP-623745])

- 19981118 EP/AK-B1 [+]

DESIGNATED CONTRACTING STATES MENTIONED IN A PATENT SPECIFICATION:

DE FR GB IT SE

- 19981118 EP/B1 [+]

PATENT SPECIFICATION

- 19981224 EP/REF-P

CORRESPONDS TO:

(DE 69414697 19981224 [DE69414697])

- 19990119 EP/ITF [+]
 - IT: TRANSLATION FOR A EP PATENT FILED
 - JACOBACCI & PERANI S.P.A.
- 19990212 EP/ET [+]
 - FR: TRANSLATION FILED
- 19991101 EP/EUG [-]
 - SE: EUROPEAN PATENT HAS LAPSED
 - 95114645.5
- 19991110 EP/26N [+]
 - NO OPPOSITION FILED
- 19991206 EP/EUG [-]
 - SE: EUROPEAN PATENT HAS LAPSED
 - 95114645.5
- 20011219 EP/25 [-]
 - LAPSED AS TO RULE 92 1 P
 - <SE 99.03.11>

UP - 2001-51

3/3 LEGALI - (C) LEGSTAT

PN - EP 623745 [EP-623745]

AP - EP 94301704/94 19940310 [1994EP-0301704]

DT - EP-P

ACTE- 19940310 EP/AE-A

- EP-APPLICATION
- {EP 94301704/94 19940310 [1994EP-0301704]}
- 19941109 EP/AK-A2 [+]
 - DESIGNATED CONTRACTING STATES IN AN APPLICATION WITHOUT SEARCH REPORT:
 - DE FR GB IT SE
- 19941109 EP/A2 [+]
 - PUBLICATION OF APPLICATION WITHOUT SEARCH REPORT
- 19950118 EP/AK-A3 [+]
 - DESIGNATED CONTRACTING STATES IN A SEARCH REPORT:
 - DE FR GB IT SE
- 19950118 EP/A3 [+]
 - SEPARATE PUBLICATION OF THE SEARCH REPORT (ART. 93)
- 19950628 EP/17P [+]
 - REQUEST FOR EXAMINATION FILED
 - 950426
- 19950712 EP/17Q [+]
 - FIRST EXAMINATION REPORT
 - 950530
- 19951227 EP/AH-P
 - DIVISIONAL APPLICATION (ART. 76) IN:
 - (EP 688953 19951227 [EP-688953])
- 19960724 EP/RPR1
 - PRIORITY (CORRECTION)
 - JP 930310 10140/93 U * JP 930312 10753/93 U * JP 930318 12092/93
 - U * JP 930518 25710/93 U * JP 931209 65784/93 U
- 19960724 EP/XX
 - MISCELLANEOUS:
- 19960731 EP/AK-B1 [+]
 - DESIGNATED CONTRACTING STATES MENTIONED IN A PATENT SPECIFICATION:
 - DE FR GB IT SE
- 19960731 EP/B1 [+]
 - PATENT SPECIFICATION
- 19960905 EP/REF-P
 - CORRESPONDS TO:
 - (DE 69400347 19960905 [DE69400347])

- 19960906 EP/ET [+]
 - FR: TRANSLATION FILED
- 19961001 EP/ITF [+]
 - IT: TRANSLATION FOR A EP PATENT FILED
 - JACOBACCI & PERANI S.P.A.
- 19970723 EP/26N [+]
 - NO OPPOSITION FILED
- 19981118 EP/AH-P
 - DIVISIONAL APPLICATION (ART. 76) IN:
 - (EP 688953 19981118 [EP-688953])
- 19991101 EP/EUG [-]
 - SE: EUROPEAN PATENT HAS LAPSED
 - 94301704.6
- 19991206 EP/EUG [-]
 - SE: EUROPEAN PATENT HAS LAPSED
 - 94301704.6
- UP - 1999-49

16/37 INPADOC - (C) INPADOC

- PN - EP 608839 B1 19970507 [EP-608839]
- TI - PRINTING APPARATUS WHICH CAN USE PRINTING TRANSFER MATERIAL EFFECTIVELY
- LA - ENG
- IN - NAKASHIMA TAKASHI [JP]; NAKAMURA ICHIRO [JP]
- PA - SHARP KK [JP]
- AP - EP 94101068/94-A 19940125 [1994EP-0101068]
- PR - JP 10140/93-A 19930125 [1993JP-0010140]
- IC - B41J-033/54
- DS - DE* GB*

1/2 LEGALI - (C) LEGSTAT

- PN - DE 69402994 [DE69402994]
- DT - DE-P
- ACTE- 19970612 DE/REF-P
 - CORRESPONDS TO
 - (EP 608839 19970612 [EP-608839])
- 19971218 DE/8373
 - TRANSLATION OF PATENT DOCUMENT OF EUROPEAN PATENT WAS RECEIVED AND HAS
 - BEEN PUBLISHED
- 19980604 DE/8364 [+]
 - NO OPPOSITION DURING TERM OF OPPOSITION
- UP - 1998-23

2/2 LEGALI - (C) LEGSTAT

- PN - EP 608839 [EP-608839]
- AP - EP 94101068/94 19940125 [1994EP-0101068]
- DT - EP-P
- ACTE- 19940125 EP/AE-A
 - EP-APPLICATION
 - {EP 94101068/94 19940125 [1994EP-0101068]}
- 19940803 EP/AK-A2 [+]
 - DESIGNATED CONTRACTING STATES IN AN APPLICATION WITHOUT SEARCH REPORT:
 - DE GB
- 19940803 EP/A2 [+]
 - PUBLICATION OF APPLICATION WITHOUT SEARCH REPORT
- 19940914 EP/AK-A3 [+]
 - DESIGNATED CONTRACTING STATES IN A SEARCH REPORT:
 - DE GB

- 19940914 EP/A3 [+]
 - SEPARATE PUBLICATION OF THE SEARCH REPORT (ART. 93)
- 19950215 EP/17P [+]
 - REQUEST FOR EXAMINATION FILED
 - 941214
- 19960228 EP/17Q [+]
 - FIRST EXAMINATION REPORT
 - 960112
- 19970507 EP/AK-B1 [+]
 - DESIGNATED CONTRACTING STATES MENTIONED IN A PATENT SPECIFICATION:
 - DE GB
- 19970507 EP/B1 [+]
 - PATENT SPECIFICATION
- 19970612 EP/REF-P
 - CORRESPONDS TO:
 - (DE 69402994 19970612 [DE69402994])
- 19980429 EP/26N [+]
 - NO OPPOSITION FILED
- UP - 1998-18

17/37 INPADOC - (C) INPADOC

PN - EP 688953 B1 19981118 [EP-688953]

TI - SWASH PLATE TYPE COMPRESSOR WITH LUBRICATING MECHANISM BETWEEN THE SHOE AND SWASH PLATE

LA - ENG

IN - OGURA TOSHIYUKI [JP]; SAITO KENJI [JP]; SHIMIZU SHIGEMI [JP]; SAKAKI MASAKATSU [JP]

PA - SANDEN CORP [JP]

AP - EP 95114645/95-A 19940310 [1995EP-0114645]

PR - EP 94301704/94-A3 19940310 [1994EP-0301704]

- JP 10140/93-U 19930310 [1993JP-U010140]
- JP 10753/93-U 19930312 [1993JP-U010753]
- JP 12092/93-U 19930318 [1993JP-U012092]
- JP 25710/93-U 19930518 [1993JP-U025710]
- JP 65784/93-U 19931209 [1993JP-U065784]

IC - F04B-027/08; F04B-001/14; F04B-039/02

DS - DE* FR* GB* IT* SE*

1/3 LEGALI - (C) LEGSTAT

PN - DE 69414697 [DE69414697]

DT - DE-P

ACTE- 19981224 DE/REF-P

- CORRESPONDS TO
- (EP 688953 19981224 [EP-688953])
- 19990429 DE/8373
- TRANSLATION OF PATENT DOCUMENT OF EUROPEAN PATENT WAS RECEIVED AND HAS BEEN PUBLISHED
- 19991216 DE/8364 [+]
- NO OPPOSITION DURING TERM OF OPPOSITION

UP - 1999-50

2/3 LEGALI - (C) LEGSTAT

PN - EP 688953 [EP-688953]

AP - EP 95114645/95 19940310 [1995EP-0114645]

DT - EP-P

ACTE- 19940310 EP/AE-A

- EP-APPLICATION

{EP 95114645/95 19940310 [1995EP-0114645]}

- 19951227 EP/AC-P
DIVISIONAL APPLICATION (ART. 76) OF:
(EP 623745 19951227 [EP-623745])
- 19951227 EP/AK-A2 [+]
DESIGNATED CONTRACTING STATES IN AN APPLICATION WITHOUT SEARCH REPORT:
DE FR GB IT SE
- 19951227 EP/A2 [+]
PUBLICATION OF APPLICATION WITHOUT SEARCH REPORT
- 19960515 EP/AK-A3 [+]
DESIGNATED CONTRACTING STATES IN A SEARCH REPORT:
DE FR GB IT SE
- 19960515 EP/A3 [+]
SEPARATE PUBLICATION OF THE SEARCH REPORT (ART. 93)
- 19970108 EP/17P [+]
REQUEST FOR EXAMINATION FILED
961101
- 19970305 EP/17Q [+]
FIRST EXAMINATION REPORT
970117
- 19981118 EP/AC-P
DIVISIONAL APPLICATION (ART. 76) OF:
(EP 623745 19981118 [EP-623745])
- 19981118 EP/AK-B1 [+]
DESIGNATED CONTRACTING STATES MENTIONED IN A PATENT SPECIFICATION:
DE FR GB IT SE
- 19981118 EP/B1 [+]
PATENT SPECIFICATION
- 19981224 EP/REF-P
CORRESPONDS TO:
(DE 69414697 19981224 [DE69414697])
- 19990119 EP/ITF [+]
IT: TRANSLATION FOR A EP PATENT FILED
JACOBACCI & PERANI S.P.A.
- 19990212 EP/ET [+]
FR: TRANSLATION FILED
- 19991101 EP/EUG [-]
SE: EUROPEAN PATENT HAS LAPSED
95114645.5
- 19991110 EP/26N [+]
NO OPPOSITION FILED
- 19991206 EP/EUG [-]
SE: EUROPEAN PATENT HAS LAPSED
95114645.5
- 20011219 EP/25 [-]
LAPSED AS TO RULE 92 1 P
<SE 99.03.11>

UP - 2001-51

3/3 LEGALI - (C) LEGSTAT

PN - EP 623745 [EP-623745]

AP - EP 94301704/94 19940310 [1994EP-0301704]

DT - EP-P

ACTE- 19940310 EP/AE-A

EP-APPLICATION

{EP 94301704/94 19940310 [1994EP-0301704]}

- 19941109 EP/AK-A2 [+]

DESIGNATED CONTRACTING STATES IN AN APPLICATION WITHOUT SEARCH REPORT:

DE FR GB IT SE

- 19941109 EP/A2 [+]
 - PUBLICATION OF APPLICATION WITHOUT SEARCH REPORT
- 19950118 EP/AK-A3 [+]
 - DESIGNATED CONTRACTING STATES IN A SEARCH REPORT:
 - DE FR GB IT SE
- 19950118 EP/A3 [+]
 - SEPARATE PUBLICATION OF THE SEARCH REPORT (ART. 93)
- 19950628 EP/17P [+]
 - REQUEST FOR EXAMINATION FILED
 - 950426
- 19950712 EP/17Q [+]
 - FIRST EXAMINATION REPORT
 - 950530
- 19951227 EP/AH-P
 - DIVISIONAL APPLICATION (ART. 76) IN:
 - (EP 688953 19951227 [EP-688953])
- 19960724 EP/RPR1
 - PRIORITY (CORRECTION)
 - JP 930310 10140/93 U * JP 930312 10753/93 U * JP 930318 12092/93
 - U * JP 930518 25710/93 U * JP 931209 65784/93 U
- 19960724 EP/XX
 - MISCELLANEOUS:
- 19960731 EP/AK-B1 [+]
 - DESIGNATED CONTRACTING STATES MENTIONED IN A PATENT SPECIFICATION:
 - DE FR GB IT SE
- 19960731 EP/B1 [+]
 - PATENT SPECIFICATION
- 19960905 EP/REF-P
 - CORRESPONDS TO:
 - (DE 69400347 19960905 [DE69400347])
- 19960906 EP/ET [+]
 - FR: TRANSLATION FILED
- 19961001 EP/ITF [+]
 - IT: TRANSLATION FOR A EP PATENT FILED
 - JACOBACCI & PERANI S.P.A.
- 19970723 EP/26N [+]
 - NO OPPOSITION FILED
- 19981118 EP/AH-P
 - DIVISIONAL APPLICATION (ART. 76) IN:
 - (EP 688953 19981118 [EP-688953])
- 19991101 EP/EUG [-]
 - SE: EUROPEAN PATENT HAS LAPSED
 - 94301704.6
- 19991206 EP/EUG [-]
 - SE: EUROPEAN PATENT HAS LAPSED
 - 94301704.6
- UP - 1999-49

18/37 INPADOC - (C) INPADOC

- PN - JP 3094720 B2 20001003 [JP3094720]
- AP - JP 25710/93-A 19930215 [1993JP-0025710]
- PR - JP 25710/93-A 19930215 [1993JP-0025710]
- IC - F04B-027/08

19/37 INPADOC - (C) INPADOC

- PN - JP 2000286374 A2 20001013 [JP2000286374]
- TI - SEMICONDUCTOR INTEGRATED CIRCUIT DEVICE

IN - KAJIWARA YUJIRO; SUZUKI KAZUNARI; TSUBOSAKI KUNIHIRO; SUZUKI
HIROMICHI; MIYAKI YOSHINORI; NAITO TAKAHIRO; KAWAI SUEO
PA - HITACHI LTD; HITACHI ULSI SYS CO LTD
AP - JP 2000073486/00-A 20000101 [2000JP-0073486]
PR - JP 71116/92-A 19920327 [1992JP-0071116]
- JP 320098/92-A 19921130 [1992JP-0320098]
IC - H01L-023/50

20/37 INPADOC - (C) INPADOC
PN - JP 3124985 B2 20010115 [JP3124985]
IN - NAKAJIMA TAKASHI; NAKAMURA ICHIRO
PA - SHARP KK
AP - JP 10140/93-A 19930125 [1993JP-0010140]
PR - JP 10140/93-A 19930125 [1993JP-0010140]
IC - B41J-033/36

21/37 INPADOC - (C) INPADOC
PN - JP 6135712 A2 19940517 [JP06135712]
TI - PRODUCTION OF TRANSPARENT AEROGEL
IN - YOKOGAWA HIROSHI; YOKOYAMA MASARU; TSUBAKI KENJI
PA - MATSUSHITA ELECTRIC WORKS LTD
AP - JP 10753/93-A 19930126 [1993JP-0010753]
PR - JP 10753/93-A 19930126 [1993JP-0010753]
- JP 243227/92-A 19920911 [1992JP-0243227]
IC - C01B-033/16

22/37 INPADOC - (C) INPADOC
PN - JP 6216303 A2 19940805 [JP06216303]
TI - LEAD FRAME AND ITS MANUFACTURE, AND MANUFACTURE OF SEMICONDUCTOR
INTEGRATED CIRCUIT USING IT
IN - KAJIWARA YUJIRO; SUZUKI KAZUNARI; TSUBOSAKI KUNIHIRO; SUZUKI
HIROMICHI; MIYAKI YOSHINORI; NAITO TAKAHIRO; KAWAI SUEO
PA - HITACHI LTD; HITACHI MICOM SYST KK
AP - JP 65784/93-A 19930325 [1993JP-0065784]
PR - JP 65784/93-A 19930325 [1993JP-0065784]
- JP 71116/92-A 19920327 [1992JP-0071116]
- JP 320098/92-A 19921130 [1992JP-0320098]
IC - H01L-023/50

23/37 INPADOC - (C) INPADOC
PN - JP 6219027 A2 19940809 [JP06219027]
TI - PRINTER
IN - NAKAJIMA TAKASHI; NAKAMURA ICHIRO
PA - SHARP KK
AP - JP 10140/93-A 19930125 [1993JP-0010140]
PR - JP 10140/93-A 19930125 [1993JP-0010140]
IC - B41J-033/36

24/37 INPADOC - (C) INPADOC
PN - JP 6225516 A2 19940812 [JP06225516]
TI - INVERTER APPARATUS
IN - MIYAZAKI MASANORI
PA - TOKYO SHIBAURA ELECTRIC CO
AP - JP 12092/93-A 19930128 [1993JP-0012092]

PR - JP 12092/93-A 19930128 [1993JP-0012092]
IC - H02M-001/00; H02M-007/48

25/37 INPADOC - (C) INPADOC
PN - JP 6241162 A2 19940830 [JP06241162]
TI - SWASH PLATE TYPE COMPRESSOR
IN - IKEDA ISATO; MORI SHIGEO; NAKAJIMA TOSHIYUKI; TAKEMOTO SHOJI
PA - TOYODA AUTOMATIC LOOM WORKS
AP - JP 25710/93-A 19930215 [1993JP-0025710]
PR - JP 25710/93-A 19930215 [1993JP-0025710]
IC - F04B-027/08

26/37 INPADOC - (C) INPADOC
PN - JP 10326859 A2 19981208 [JP10326859]
TI - LEAD FRAME AND SEMICONDUCTOR INTEGRATED CIRCUIT DEVICE USING THE SAME
IN - KAJIWARA YUJIRO; SUZUKI KAZUNARI; TSUBOSAKI KUNIHIRO; SUZUKI
HIROMICHI; MIYAKI YOSHINORI; NAITO TAKAHIRO; KAWAI SUEO
PA - HITACHI LTD; HITACHI MICROCOMPUTER SYST
AP - JP 185261/98-A 19980630 [1998JP-0185261]
PR - JP 185261/98-A 19980630 [1998JP-0185261]
- JP 71116/92-A 19920327 [1992JP-0071116]
- JP 320098/92-A 19921130 [1992JP-0320098]
IC - H01L-023/50

27/37 INPADOC - (C) INPADOC
PN - JP 2891607 B2 19990517 [JP2891607]
IN - KAJIWARA YUJIRO; SUZUKI KAZUNARI; TSUBOSAKI KUNIHIRO; SUZUKI
HIROMICHI; MIYAKI YOSHINORI; NAITO TAKAHIRO; KAWAI SUEO
PA - HITACHI LTD; HITACHI CHO ERU ESU AI SHISUTE
AP - JP 65784/93-A 19930325 [1993JP-0065784]
PR - JP 65784/93-A 19930325 [1993JP-0065784]
- JP 71116/92-A 19920327 [1992JP-0071116]
- JP 320098/92-A 19921130 [1992JP-0320098]
IC - H01L-023/50; H01L-021/60

28/37 INPADOC - (C) INPADOC
PN - JP 2907667 B2 19990621 [JP2907667]
IN - YOKOGAWA HIROSHI; YOKOYAMA MASARU; TSUBAKI KENJI
PA - MATSUSHITA ELECTRIC WORKS LTD
AP - JP 10753/93-A 19930126 [1993JP-0010753]
PR - JP 10753/93-A 19930126 [1993JP-0010753]
- JP 243227/92-A 19920911 [1992JP-0243227]
IC - C01B-033/16

29/37 INPADOC - (C) INPADOC
PN - JP 11224928 A2 19990817 [JP11224928]
TI - SEMICONDUCTOR INTEGRATED CIRCUIT
IN - KAJIWARA YUJIRO; SUZUKI KAZUNARI; TSUBOSAKI KUNIHIRO; SUZUKI
HIROMICHI; MIYAKI YOSHINORI; NAITO TAKAHIRO; KAWAI SUEO
PA - HITACHI LTD; HITACHI ULSI SYS CO LTD
AP - JP 333269/98-A 19980101 [1998JP-0333269]
PR - JP 71116/92-A 19920327 [1992JP-0071116]
- JP 320098/92-A 19921130 [1992JP-0320098]
IC - H01L-023/50

30/37 INPADOC - (C) INPADOC
PN - JP 11224929 A2 19990817 [JP11224929]
TI - SEMICONDUCTOR INTEGRATED CIRCUIT DEVICE
IN - KAJIWARA YUJIRO; SUZUKI KAZUNARI; TSUBOSAKI KUNIHIRO; SUZUKI
HIROMICHI; MIYAKI YOSHINORI; NAITO TAKAHIRO; KAWAI SUEO
PA - HITACHI LTD; HITACHI ULSI SYS CO LTD
AP - JP 333270/98-A 19980101 [1998JP-0333270]
PR - JP 71116/92-A 19920327 [1992JP-0071116]
- JP 320098/92-A 19921130 [1992JP-0320098]
IC - H01L-023/50

31/37 INPADOC - (C) INPADOC
PN - JP 11224930 A2 19990817 [JP11224930]
TI - SEMICONDUCTOR INTEGRATED CIRCUIT DEVICE
IN - KAJIWARA YUJIRO; SUZUKI KAZUNARI; TSUBOSAKI KUNIHIRO; SUZUKI
HIROMICHI; MIYAKI YOSHINORI; NAITO TAKAHIRO; KAWAI SUEO
PA - HITACHI LTD; HITACHI ULSI SYS CO LTD
AP - JP 333271/98-A 19980101 [1998JP-0333271]
PR - JP 71116/92-A 19920327 [1992JP-0071116]
- JP 320098/92-A 19921130 [1992JP-0320098]
IC - H01L-023/50

32/37 INPADOC - (C) INPADOC
PN - KR 9704385 B1 19970327 [KR9704385]
TI - SWASH PLATE TYPE COMPRESSOR
IN - OGURA TOSHIYUKI [JP]; SHIMIZU SHIGEMI [JP]; SAITO KENJI [JP]; SAKAKI
MASAKATSU [JP]
PA - SANDEN CORP [JP]
AP - KR 9402800/94-A 19940215 [1994KR-0002800]
PR - JP 25710/93-A 19930215 [1993JP-0025710]
IC - F04B-027/08

33/37 INPADOC - (C) INPADOC
PN - US 5378656 A 19950103 [US5378656]
TI - LEADFRAME, SEMICONDUCTOR INTEGRATED CIRCUIT DEVICE USING THE SAME, AND
METHOD OF AND PROCESS FOR FABRICATING THE SAME
IN - KAJIHARA YUJIRO [JP]; SUZUKI KAZUNARI [JP]; TSUBOSAKI KUNIHIRO [JP];
SUZUKI HIROMICHI [JP]; MIYAKI YOSHINORI [JP]; NAITO TAKAHIRO [JP];
KAWAI SUEO [JP]
PA - HITACHI LTD [JP]; HITACHI MICROCOMPUTER SYST [JP]
AP - US 38684/93-A 19930329 [1993US-0038684]
PR - JP 71116/92-A 19920327 [1992JP-0071116]
- JP 320098/92-A 19921130 [1992JP-0320098]
IC - H01L-021/60

1/1 LEGALI - (C) LEGSTAT
PN - US 5378656 [US5378656]
AP - US 38684/93 19930329 [1993US-0038684]
DT - US-P
ACTE- 19930329 US/AE-A
APPLICATION DATA (PATENT)
{US 38684/93 19930329 [1993US-0038684]}
- 19940721 US/AS02

ASSIGNMENT OF ASSIGNOR'S INTEREST
HITACHI, LTD. CHIYODA-KU, TOKYO, JAPAN; HITACHI MICROCOMPUTER SYSTEM
LTD. KODAIR * KAJIHARA, YUJIRO : 19930304; SUZUKI, KAZUNARI :
19930304; TSUBOSAKI, KUNIHIRO : 19930304; SUZUKI, HIROMICHI : 19930304;
- 19950103 US/A
PATENT
UP - 1999-18

34/37 INPADOC - (C) INPADOC
PN - US 5415481 A 19950516 [US5415481]
TI - FEEDING OF INK RIBBON BASED ON SHAPES OF A PLURALITY OF PREVIOUSLY
PRINTED CHARACTERS
IN - NAKASHIMA TAKASHI [JP]; NAKAMURA ICHIRO [JP]
PA - SHARP KK [JP]
AP - US 184595/94-A 19940121 [1994US-0184595]
PR - JP 10140/93-A 19930125 [1993JP-0010140]
IC - B41J-033/36

1/1 LEGALI - (C) LEGSTAT
PN - US 5415481 [US5415481]
AP - US 184595/94 19940121 [1994US-0184595]
DT - US-P
ACTE- 19940121 US/AE-A
APPLICATION DATA (PATENT)
{US 184595/94 19940121 [1994US-0184595]}
- 19940121 US/AS02
ASSIGNMENT OF ASSIGNOR'S INTEREST
SHARP KABUSHIKI KAISHA 22-22, NAGAIKE-CHO, ABENO-KU OSAKA 545, JAPAN *
NAKASHIMA, TAKASHI : 19931217; NAKAMURA, ICHIRO : 19931217
- 19950516 US/A
PATENT
UP - 1999-17

35/37 INPADOC - (C) INPADOC
PN - US 5433137 A 19950718 [US5433137]
TI - THRUST BEARING STRUCTURE FOR SWASH PLATE COMPRESSOR
IN - IKEDA HAYATO [JP]; MORI HIDEO [JP]; NAKAJIMA TOSHIYUKI [JP]; TAKEMOTO
SHOJI [JP]
PA - TOYODA AUTOMATIC LOOM WORKS [JP]
AP - US 196645/94-A 19940215 [1994US-0196645]
PR - JP 25710/93-A 19930215 [1993JP-0025710]
IC - F01B-003/00

1/1 LEGALI - (C) LEGSTAT
PN - US 5433137 [US5433137]
AP - US 196645/94 19940215 [1994US-0196645]
DT - US-P
ACTE- 19940215 US/AE-A
APPLICATION DATA (PATENT)
{US 196645/94 19940215 [1994US-0196645]}
- 19940215 US/AS02
ASSIGNMENT OF ASSIGNOR'S INTEREST
KABUSHIKI KAISHA TOYODA JIDOSHOKKI SEISAKUSHO 1, TOYODA-CHO, 2-CHOME
KARIYA-SHI, * IKEDA, HAYATO : 19940207; MORI, HIDEO : 19940207;
NAKAJIMA, TOSHIYUKI : 19940207; TAKEMOTO, SHOJI : 19940207

- 19950718 US/A
PATENT
UP - 1999-17

36/37 INPADOC - (C) INPADOC
PN - US 5495789 A 19960305 [US5495789]
TI - SWASH PLATE TYPE COMPRESSOR WITH LUBRICATING MECHANISM BETWEEN THE
SHOE AND SWASH PLATE
IN - OGURA TOSHIYUKI [JP]; SAITO KENJI [JP]; SHIMIZU SHIGEMI [JP]; SAKAKI
MASAKATSU [JP]
PA - SANDEN CORP [JP]
AP - US 207640/94-A 19940309 [1994US-0207640]
PR - JP 10140/93-U 19930310 [1993JP-U010140]
- JP 10753/93-U 19930312 [1993JP-U010753]
- JP 12092/93-U 19930318 [1993JP-U012092]
- JP 25710/93-U 19930518 [1993JP-U025710]
- JP 65784/93-U 19931209 [1993JP-U065784]
IC - F01B-003/00

1/1 LEGALI - (C) LEGSTAT
PN - US 5495789 [US5495789]
AP - US 207640/94 19940309 [1994US-0207640]
DT - US-P
ACTE- 19940309 US/AE-A
APPLICATION DATA (PATENT)
{US 207640/94 19940309 [1994US-0207640]}
- 19940509 US/AS02
ASSIGNMENT OF ASSIGNOR'S INTEREST
SANDEN CORPORATION 20 KOTOBUKI-CHO, ISESAKI-SHI GUNMA 372, JAPAN *
SANDEN CORPORATION : 19940429
- 19960305 US/A
PATENT
UP - 1999-18

37/37 INPADOC - (C) INPADOC
PN - US 5637913 A 19970610 [US5637913]
TI - LEADFRAME SEMICONDUCTOR INTEGRATED CIRCUIT DEVICE USING THE SAME AND
METHOD OF AND PROCESS FOR FABRICATING THE TWO
IN - KAJIHARA YUJIRO [JP]; SUZUKI KAZUNARI [JP]; TSUBOSAKI KUNIHIRO [JP];
SUZUKI HIROMICHI [JP]; MIYAKI YOSHINORI [JP]; NAITO TAKAHIRO [JP];
KAWAI SUEO [JP]
PA - HITACHI LTD [JP]; HITACHI MICROCOMPUTER SYST [JP]
AP - US 311021/94-A 19940922 [1994US-0311021]
PR - US 311021/94-A 19940922 [1994US-0311021]
- JP 71116/92-A 19920327 [1992JP-0071116]
- JP 320098/92-A 19921130 [1992JP-0320098]
- US 38684/93-A3 19930329 [1993US-0038684]
IC - H01L-023/495; H01L-023/48

1/1 LEGALI - (C) LEGSTAT
PN - US 5637913 [US5637913]
AP - US 311021/94 19940922 [1994US-0311021]
DT - US-P
ACTE- 19940922 US/AE-A
APPLICATION DATA (PATENT)

{US 311021/94 19940922 [1994US-0311021]}

- 19970610 US/A
PATENT
- 19990803 US/RF
REISSUE APPLICATION FILED
19990609
- 20020115 US/RF
REISSUE APPLICATION FILED
20011116

UP - 2002-05

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